Day | communiqué technical documentation

Communiqué 3.5.2 CMS Guide

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Table of Contents

1 CMS....1
1.1 CMS GUI Overview....4
1.2 Connecting....7
1.3 Content Management....9
1.3.1 Content Pages Management GUI....11
1.3.1.1 Navigation Pane....13
1.3.1.2 Page Listing....15
1.3.2 Content Pages Management Functions....17
1.3.2.1 Creating New Pages....19
1.3.2.2 Copying Pages....21
1.3.2.3 Moving Pages....23
1.3.2.4 Activating Pages....27
1.3.2.5 Deactivating Pages....28
1.3.2.6 Deleting Pages....29
1.3.2.7 Restoring Pages....30
1.3.2.8 Ordering Pages....32
1.3.2.9 Locking Pages....33
1.3.2.10 Language Manager....34
1.3.3 Advanced Content Pages Management Functions....36
1.3.3.1 Activate Tree....38
1.3.3.2 Restore Tree....42
1.3.3.3 Linkchecker....45
1.3.3.4 Offline Editor....48
1.3.3.5 Upload package....50
1.3.4 Editing Page Content....52
1.3.4.1 Toolbar....55
1.3.4.1.1 Page Properties....56
1.3.4.1.2 VersionWarp....58
1.3.4.1.3 Show Mode Switch....60
1.3.4.2 Edit Bars and New Bars....62
1.3.4.3 Content Editing Controls....65
1.3.4.3.1 Rich Edit Control....67
1.3.4.3.2 Color Control....71
1.3.4.3.3 Date Control....75
1.3.4.3.4 File Upload Control....76
1.3.4.3.5 Image Control....77
1.3.4.3.6 Image Crop Control....78
1.3.4.3.7 Image Mapping Control....

1.3.4.3.8 Media Library Control..85
1.3.4.3.9 Table Control...88
1.3.5 Editing Page Content with WebDAV..92
1.3.5.1 Setting up WebDAV...93
1.3.5.2 WebDAV Mapping and Content Editing...97
1.3.6 Editing Project Related Data..101
1.3.6.1 Package Definitions..104
1.3.6.2 Media Library...111
1.3.6.3 Glossary..117
1.3.6.4 Multi Site Manager...120
1.3.6.4.1 Introduction...121
1.3.6.4.2 Use Cases...122
1.3.6.4.3 Overview..124
1.3.6.4.3.1 Setting Inheritance Constraints..125
1.3.6.4.3.2 Testing and Using Inheritance Constraints..129
1.3.6.4.3.3 Language coherence...132
1.3.6.5 Workflows...133
1.4 Using Workflows...141
1.4.1 Creating a new Workflow Definition...145
1.4.2 Starting a Workflow...146
1.4.2.1 Manually Starting a Workflow Process...147
1.4.2.2 Automatically Starting a Workflow Process..156
1.4.3 Editing Pages in Workflow..157
1.4.4 Checking Workflow Progress..158
1.4.5 Inbox...163
1.4.5.1 Workflow Actions..165
1.4.5.1.1 Lock/Unlock/Break Lock..166
1.4.5.1.2 Previous...167
1.4.5.1.3 Next..169
1.4.5.1.4 Details...172
1.4.6 True parallel Workflows..176
1.4.7 Automatic Advance..177
1.4.8 Script Execution as Workflow Step...178
1.4.9 Conditional Workfows...179
1.4.9.1 Conditional Jumps..180
1.4.9.2 Parallel Steps Selection..182
1.4.10 Conditional Workflow Selection...184
1.4.11 Examples...185
1.4.11.1 Parallel Workflow...186
1.4.11.2 Conditional Workflow...192
1.4.12 Using Forms Within Worfkflow Steps..

1.4.12.1 Simple Forms Binding....198
1.4.12.2 Application-Specific Forms Binding....199
1.4.12.3 Pre and Post Methods....201
1.4.12.4 Workflow Conditions....203
1.4.12.5 Example Application....204
1.4.12.5.1 Specification....205
1.4.12.5.2 Solution....206
1.4.12.5.3 Client Page Template....207
1.4.12.5.4 Forms Paragraph Template....208
1.4.12.5.5 Four Forms Pages....209
1.5 User Management....214
1.5.1 User Management GUI....216
1.5.1.1 User/User Group Listing....218
1.5.2 User Management Functions....220
1.5.2.1 Creating New Users....222
1.5.2.1.1 New User....224
1.5.2.1.2 New ACL User....226
1.5.2.1.3 New Replication Delivery Agent....228
1.5.2.1.4 New Replication Receiver Agent....230
1.5.2.1.5 New User Folder....232
1.5.2.2 Editing User Rights and Properties....234
1.5.2.2.1 User Properties....235
1.5.2.2.2 ACL User Properties....240
1.5.2.2.3 Replication Delivery Agent Properties....242
1.5.2.2.4 Replication Receiver Agent Properties....248
1.5.2.2.5 User Folder Properties....250
1.5.2.2.6 Editing Page Access Rights....251
1.5.2.3 Activation / Replication of Users....254
1.5.2.4 Deactivating Users....255
1.5.2.5 Deleting Users....256
1.5.3 User Group Management Functions....257
1.5.3.1 Creating new User Groups....258
1.5.3.2 Editing User Group Properties....260
1.5.3.3 Activation/Replication of User Groups....263
1.5.3.4 Deactivating User Groups....264
1.5.3.5 Delete User Groups....265
1.5.4 Impersonation....266
1.5.4.1 Enabling Impersonation....267
1.5.4.2 Granting Impersonation Permission....272
1.5.4.3 Impersonating Another User....274
1.6 Roles Management....277
1.6.1 Role Management GUI....

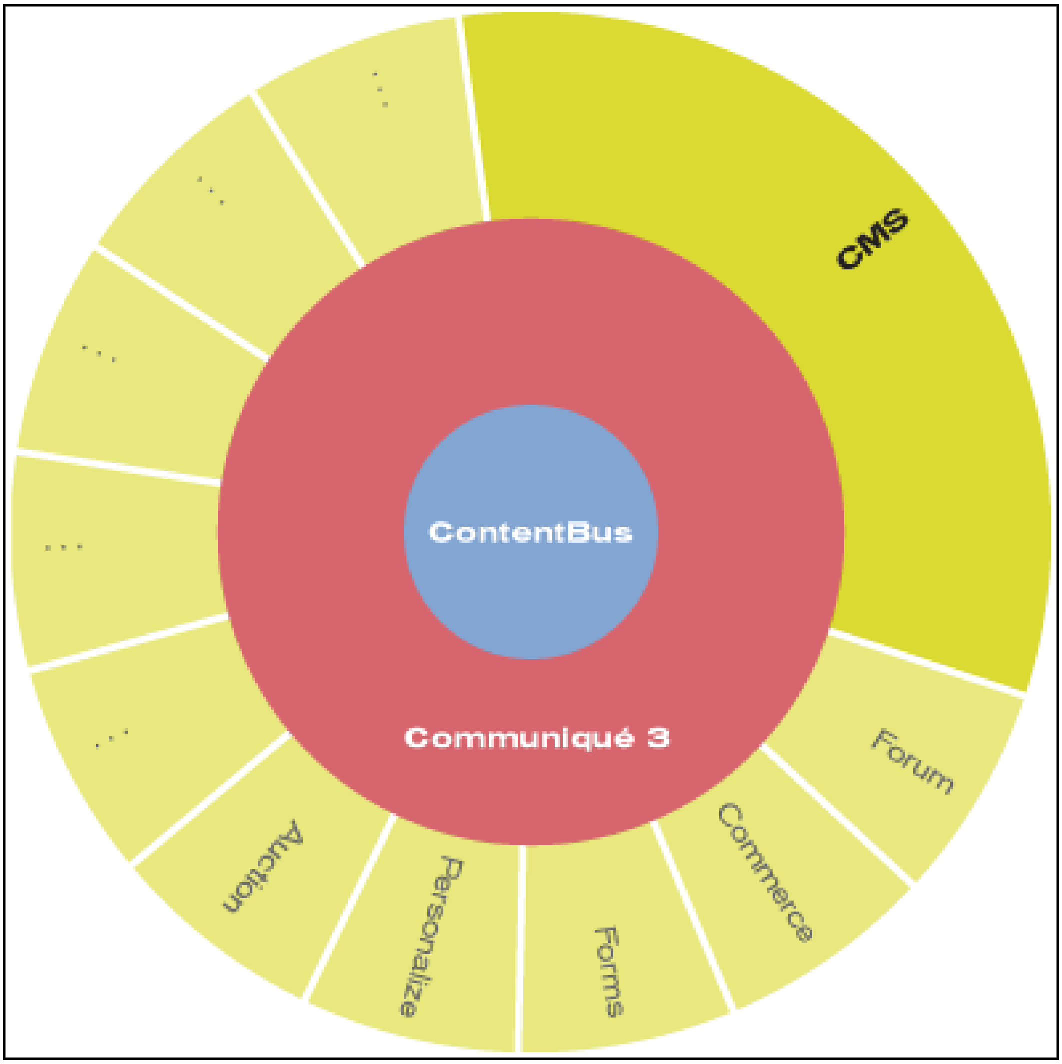
1.6.2 Adding a Role....279
1.6.3 Editing Role Properties....281
1.6.4 Deleting a Role....288
1.7 CMS Search....289
1.7.1 CMS Search GUI....290
1.7.2 Content Management Audit Log Search....292
1.7.3 Content Search....294
1.7.4 Pages with On/Off Times....296
1.7.5 Page Permission Search....298
1.7.6 Search and Replace....300
1.8 Communiqué Unify Engine Status Dialog....303
1.9 User Properties Dialog....

1. CMS

The CMS is a Communiqué 3.5 **application**. It is used to:

- **Manage the content repository** of the underlying ContentBus.
- **Replicate content** from the underlying ContentBus repository to other Communiqué instances or different applications.

All CMS application data (scripts, templates etc.) is itself stored through the ContentBus and is part of the CFC library in Communiqué 3.5.



The applications shown in the outer layer of this diagram (forum, commerce etc.) are other Communiqué 3.5 applications, created by Day Software or other vendors.

All project specific functionalities, especially the description of the project specific templates can be

found in the user manual of your project.

The following sections describe all functions of the CMS application.

All interaction between the author and the CMS console takes place through the web browser. It is important to **set the browser preferences to update on every request**, in order to ensure that every change made to the website is reflected in the page displayed by the browser.

If this is not done, the user will be forced to manually Refresh/Reload the web page after each change is made. Consult the browser documentation for further details.

CMS

- CMS GUI Overview
- Connecting
- Content Management
  - Content Pages Management GUI
  - Content Pages Management Functions
  - Advanced Content Pages Management Functions
  - Editing Page Content
  - Editing Page Content with WebDAV
  - Editing Project Related Data
- Using Workflows
  - Creating a new Workflow Definition
  - Starting a Workflow
  - Editing Pages in Workflow
  - Checking Workflow Progress
  - Inbox
  - True parallel Workflows
  - Automatic Advance
  - Script Execution as Workflow Step
  - Conditional Workfows
  - Conditional Workflow Selection

- Examples
- Using Forms Within Worfkflow Steps
- User Management
  - User Management GUI
  - User Management Functions
  - User Group Management Functions
  - Impersonation
- Roles Management
  - Role Management GUI
  - Adding a Role
  - Editing Role Properties
  - Deleting a Role
- CMS Search
  - CMS Search GUI
  - Content Management Audit Log Search
  - Content Search
  - Pages with On/Off Times
  - Page Permission Search
  - Search and Replace
- Communiqué Unify Engine Status Dialog
- User Properties Dialog

1.1. CMS GUI Overview

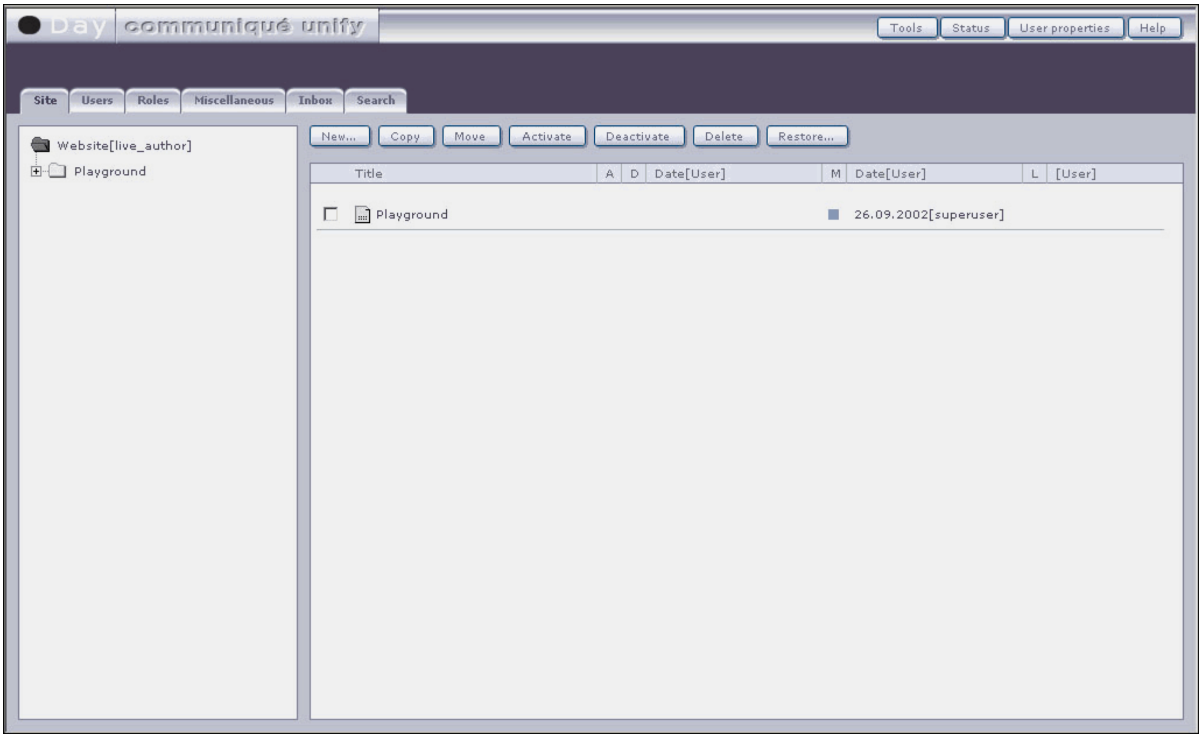
All information regarding a project is managed through the ContentBus:

- The **project content.** For example, web page content, bank accounts, shop content, or auction info.
- Your **project specific templates and scripts**.
- The properties, access rights and roles of each **user**.
- **Workflow** process definitions and information.
- All information regarding **replication** of content to other applications.

The web interface of the CMS is organized into an administration and authoring console (referred to as the console) that presents different *views* on the ContentBus content repository depending on the content's purpose.

These views are organized visually and accessed using tabs in the dialog shown below. Each tab in the console activates a view containing content and function related to the tab heading.

The following is a general overview of the console:



GUI Element	Description
Systray	Tools: A collection of advanced content management tools e.g., for the replication of project content tree sections.

	Status: Gives an overview of the current status of the Communiqué system. User Properties: The currently logged-in user can edit his properties here. **Help**: Opens the help dialog for the CMS console. You will find this button in various different dialogs of the CMS.
Site Tab	This is a view on the **project content**. It shows the *real* content of your project (web pages, for example). It also offers functions to manage or replicate this content to other Communiqué instances or applications.
Users Tab	This is a view on all authors and users that have access to the project data in some form. It offers functions to manage different types of users and to replicate them to other Communiqué instances or applications. The sender and receiver of content replications are represented here as abstract users, called **agents**. All these users can be organized into user groups.
Roles Tab	An author can have **different roles for different sections** of your projects content. The author gets different access rights to the content of a page based upon the privileges specified in the role.
Miscellaneous	This view is a special section which contains special pages to store different types of project related data, for example, content packages, media libraries, workflow process definitions, and so forth.
Inbox Tab	The inbox is part of workflow functionality. It is a **virtual mailbox** informing authors about content pages that have been assigned to them according to workflow process definitions. It has functions to manage workflow packages.

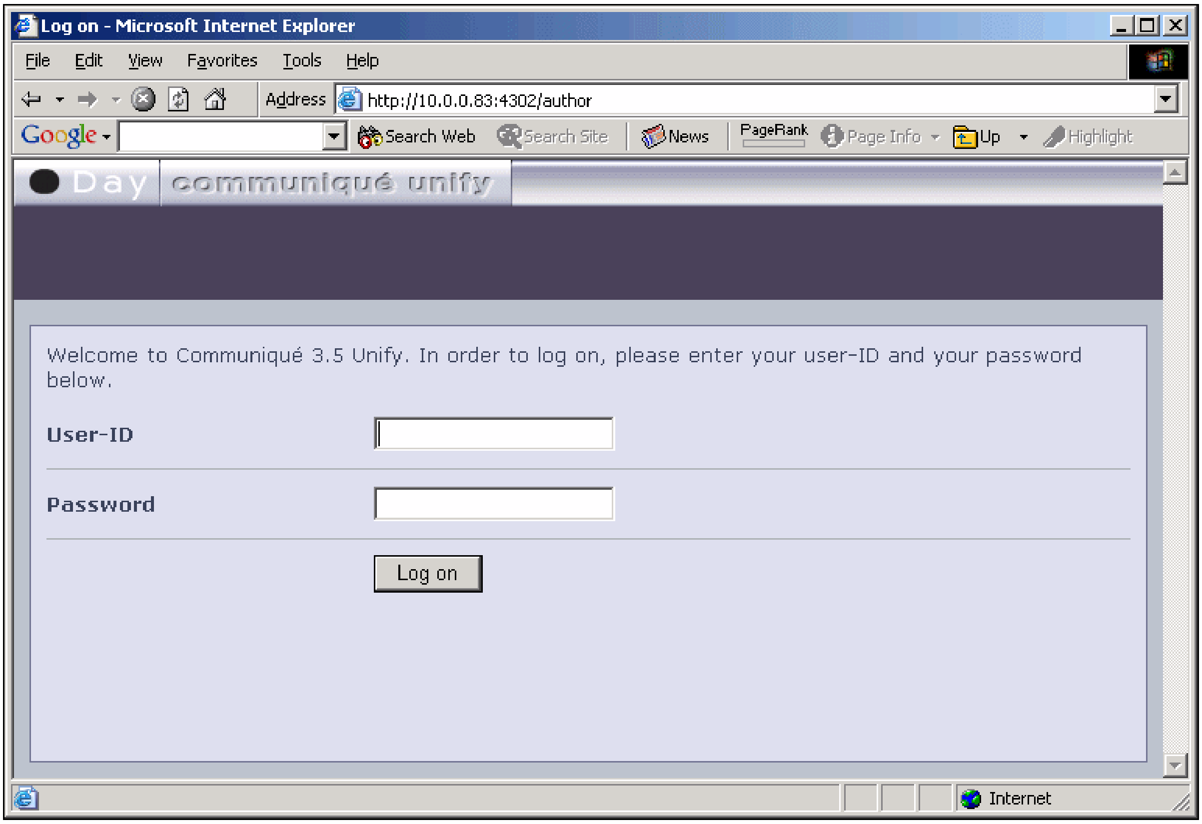
Search Tab	In this tab you may search the project data in various ways, from simple content search to finding users that have specific rights in specific sections.

1.2. Connecting

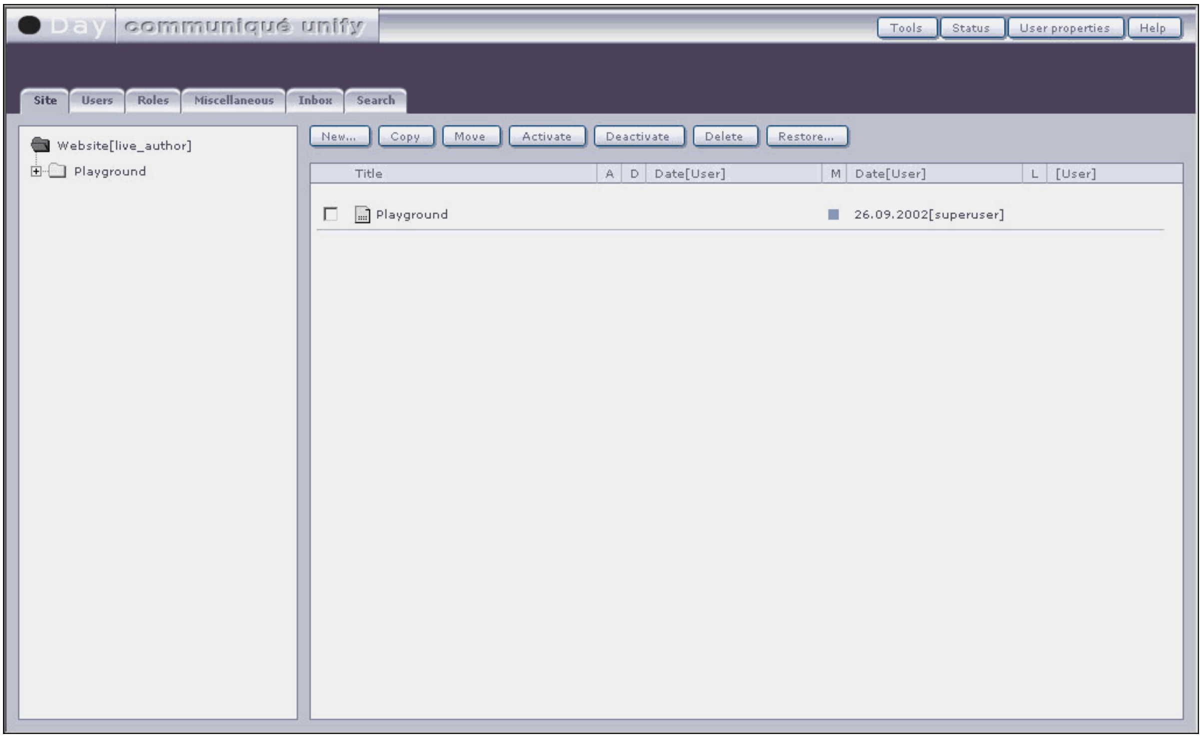
A standard URL identifies the CMS console in exactly the same way as other pages on the Internet. For example:

```
http://www.authoringsite.com:4302
```

Only registered authors have access to the CMS. Therefore, a **user name** and **password** are required to access the system:



After successful log in, the browser displays the CMS console, which should look similar to the following:


communiqué unify
Tools
Status
User properties
Help
Site
Users
Roles
Miscellaneous
Inbox
Search
Website[live_author]
Playground
New...
Copy
Move
Activate
Deactivate
Delete
Restore...
Title
A
D
Date[User]
M
Date[User]
L
[User]
Playground
26.09.2002[superuser]

1.3. Content Management

The project content is managed on two levels:

- Content Pages: You can **add**, **move**, **copy**, **delete**, **replicate** etc. content pages using the functions offered in the Site tab. Additionally, a set of advanced functions is available in the Tools section.
- Page Contents: Inside a content page you can **edit**, **add** or **delete** content elements. The functionality of a page depends on the features designed into the template of that page.

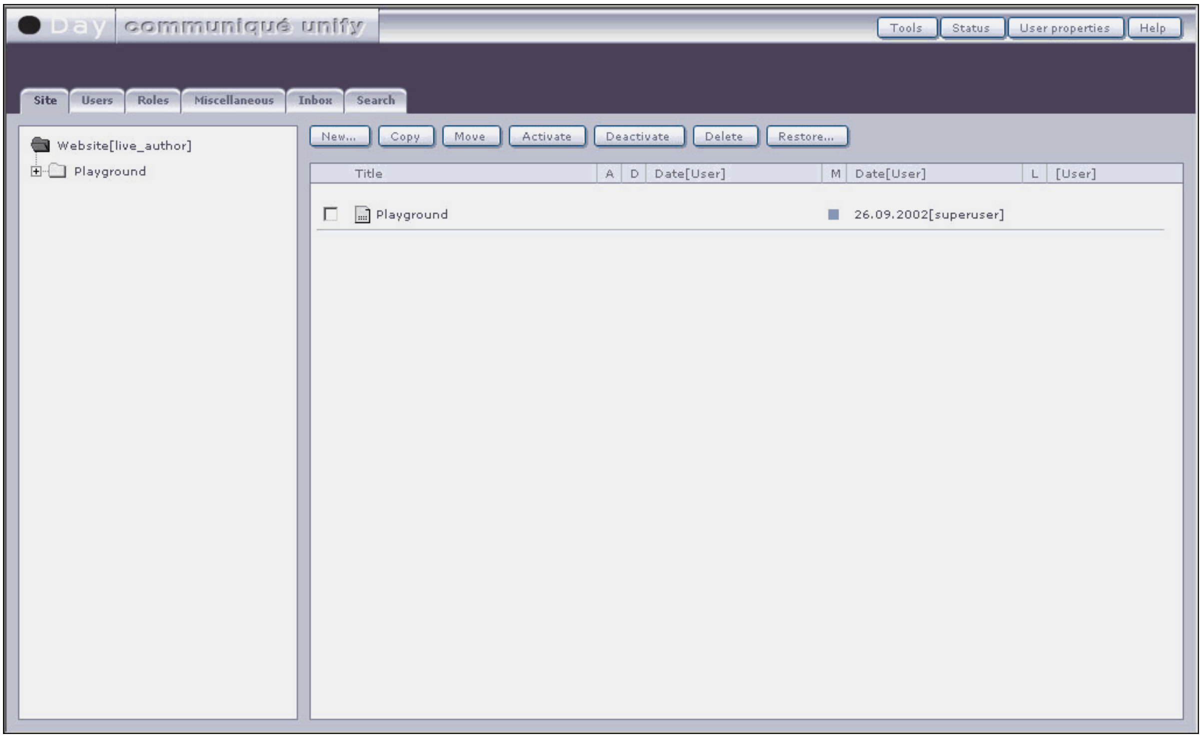
Content Management

- Content Pages Management GUI
  - Navigation Pane
  - Page Listing
- Content Pages Management Functions
  - Creating New Pages
  - Copying Pages
  - Moving Pages
  - Activating Pages
  - Deactivating Pages
  - Deleting Pages
  - Restoring Pages
  - Ordering Pages
  - Locking Pages
  - Language Manager
- Advanced Content Pages Management Functions
  - Activate Tree
  - Restore Tree
  - Linkchecker
  - Offline Editor
  - Upload package
- Editing Page Content

- Toolbar
- Edit Bars and New Bars
- Content Editing Controls
- Editing Page Content with WebDAV
  - Setting up WebDAV
  - WebDAV Mapping and Content Editing
- Editing Project Related Data
  - Package Definitions
  - Media Library
  - Glossary
  - Multi Site Manager
  - Workflows

1.3.1. Content Pages Management GUI

Content pages are managed on the **Site** tab of the console:



The following is a summary of the elements of the Site tab and their respective functions:

GUI Element	Description
Navigation Pane	The navigation pane shows the hierarchical structure of the project content in the form of a tree. The root of this tree is the node named **`Website`**, with the children being the branches representing the content. In square brackets next to the root node's name the name of the Communiqué instance is noted. >You can use the drop down list above the navigation pane to reselect the 10 last selected pages.
Page Listing	The page listing pane provides a list of the **children pages** at the selected level of the content tree. Detailed information such as creation date, last modified date and status are listed for each page.
Content Pages Management	A series of content page related management functions are available across the top of the page listing pane. These functions include :

Functions	- New: Create a new page. - Copy: Copy the selected page(s). - Move: Move the selected page(s). - Activate: Replicate the selected page(s) to subscribers. - Deactivate: Delete selected page(s) on the subscribers. - Delete : Delete the selected page(s). - Restore: Restore a previous version of the selected page(s).

Content Pages Management GUI

- Navigation Pane
- Page Listing

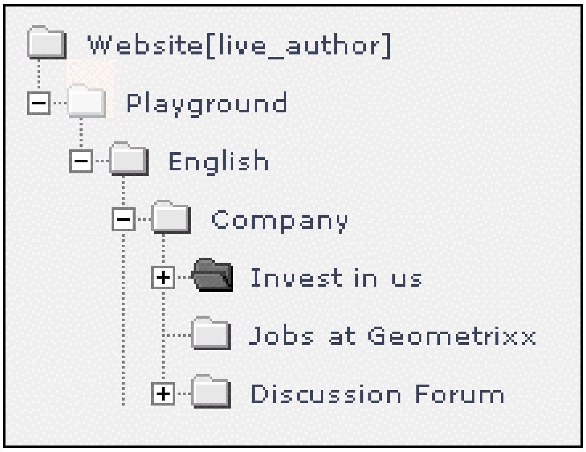
1.3.1.1. Navigation Pane

.

The navigation pane shows the hierarchical structure of the project's content in the form of a tree.

The root of this tree is the node named **`Website`**, with the children being the branches representing the content. In square brackets next to the root node the instance name of Communiqué is shown. In the above example its `live_author`.

The pages are shown in different ways depending on users access rights, for example:

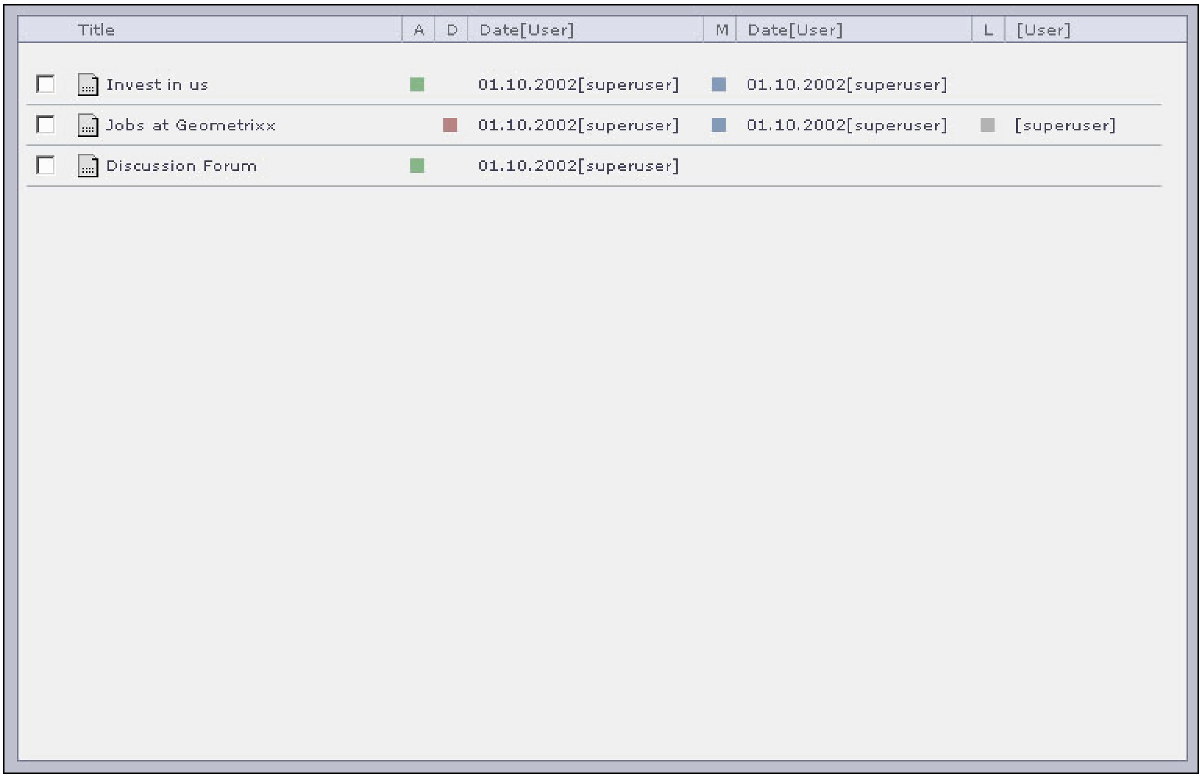


User Rights	Description
Editing	Editable pages are listed with a clickable folder icon and the title text of the page next to it, or the label if title is not set. If the page is selected the folder is drown open and highlighted, as the `Invest in us` page in the above sample screenshot. If the selected page has subpages they get listed in the page listing.
No Rights	If the user has no access rights at all, the page is not shown.But if he has editing rights to any of the sub pages, then the page is shown but its not klickable and it can't be opened. In the above example the user has only editing rights on `Invest in us` , that why the ancestors are not clickable expect for the direct parent so that the child pages can be listed in the page listing.
Read Rights	If the logged in user has read rights only the page is again not shown, but

	he can access the page directly through the URL, but he won't be able to edit the content.

1.3.1.2. Page Listing

The page listing pane provides a list of the **children pages** at the selected level of the content tree. Detailed information for each page is shown:

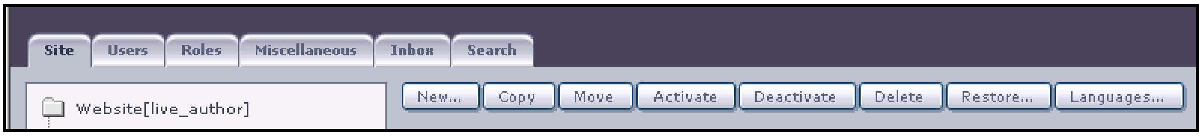


GUI Element	Description
Checkbox	Content page management actions are executed on the checked pages.
Document Icon	Clicking the document icon of a page will open it in a separate window where its content can be edited.
Page Title	The title of the page.
Activate/Deactivate Indicators	A page can have three different activation/replication states: **- Page has never been activated or deactivated**: In this case no indicator is set. **- Page has been** activated: A green square in the **A** row will be visible. **- Page has been** deactivated: A red square in the **D** row will be visible.
Activation/Deactivation	Date of last activation/deactivation and name of the user that performed

Date and User	the action.
Modified Indicator	A blue square is shown if the page has been modified since the last activation/deactivation. It gets cleared with the next activation/deactivation.
Modification Date and User	Date and name of the user who did the last modification on the page. It gets cleared with the next activation/deactivation.
Locked Indicator	Shows a light gray square if the page has been locked by a user for exclusive editing.
Locking User	Name of the user who locked the page.

1.3.2. Content Pages Management Functions

The content pages management functions are located in the Site view above the page listing pane:



The actions available to the author depend upon the rights granted to him. When an action button is clicked that action is performed on all the pages that have their checkboxes set. Following actions are available:

Adds a new page into the current branch.

Copies the selected page(s) to a different location in the content tree.

Moves the selected page(s) to a different location in the content tree.

Replicates the selected page(s) to the defined subscribers.

Deactivates the selected page(s) on the defined subscribers.

Deletes the selected pages(s) from the ContentBus repository.

Opens a dialog where you can restore previous versions of the pages in the page listing.

There are two more content page related functions, Ordering Pages and Locking Pages that are not found in the Site view action menu.

Opens the Language Manager.

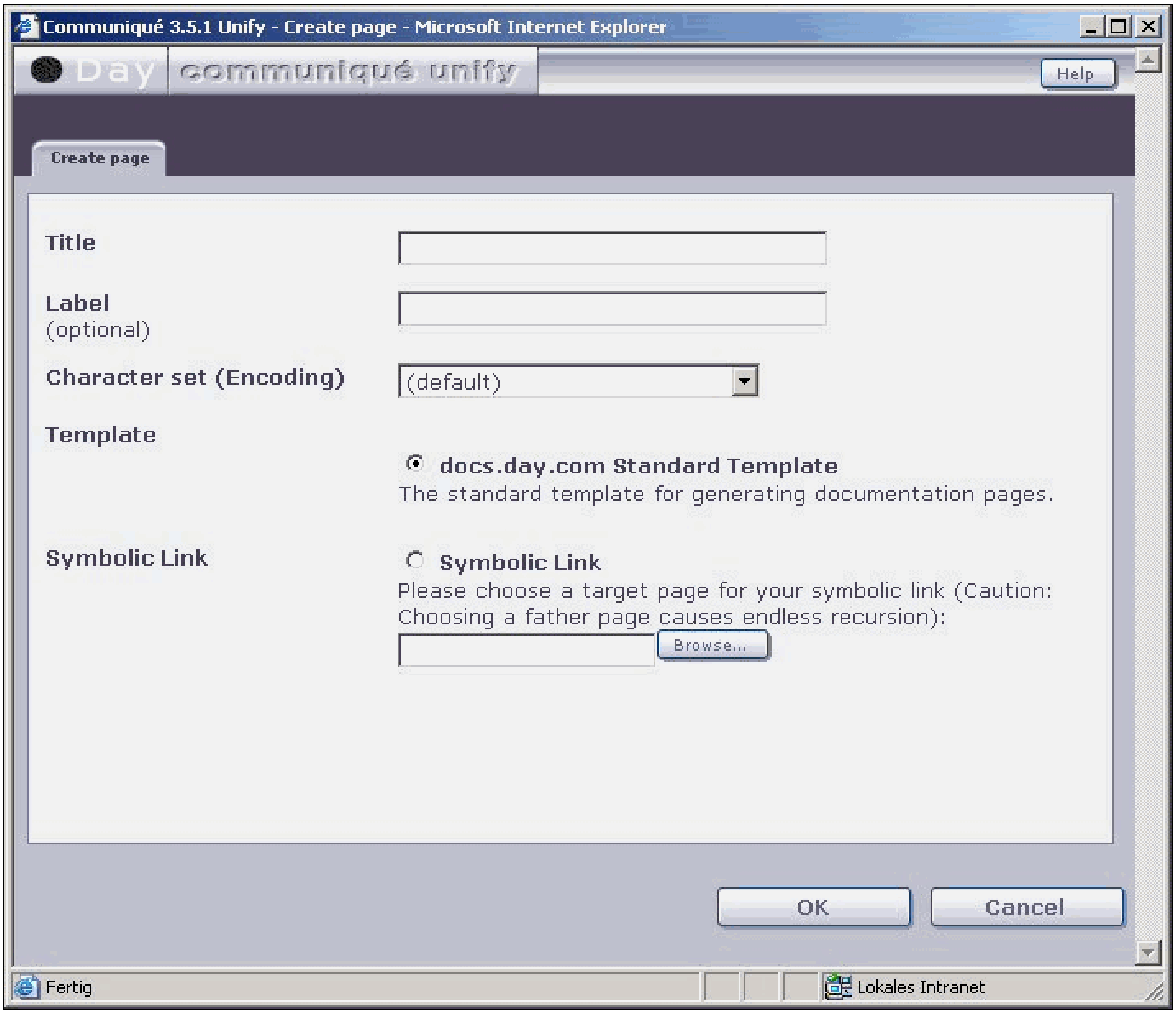
Content Pages Management Functions

- Creating New Pages
- Copying Pages
- Moving Pages
- Activating Pages
- Deactivating Pages
- Deleting Pages
- Restoring Pages
- Ordering Pages
- Locking Pages
- Language Manager

1.3.2.1. Creating New Pages

To create a new page, first select the branch where the new page should be inserted. This is done by selecting the new page's **parent** page in the content tree, so that the new page's **sibling** pages are listed in the page listing.

Then click the **`New#`** button. CMS displays the **`Create Page`** dialog:



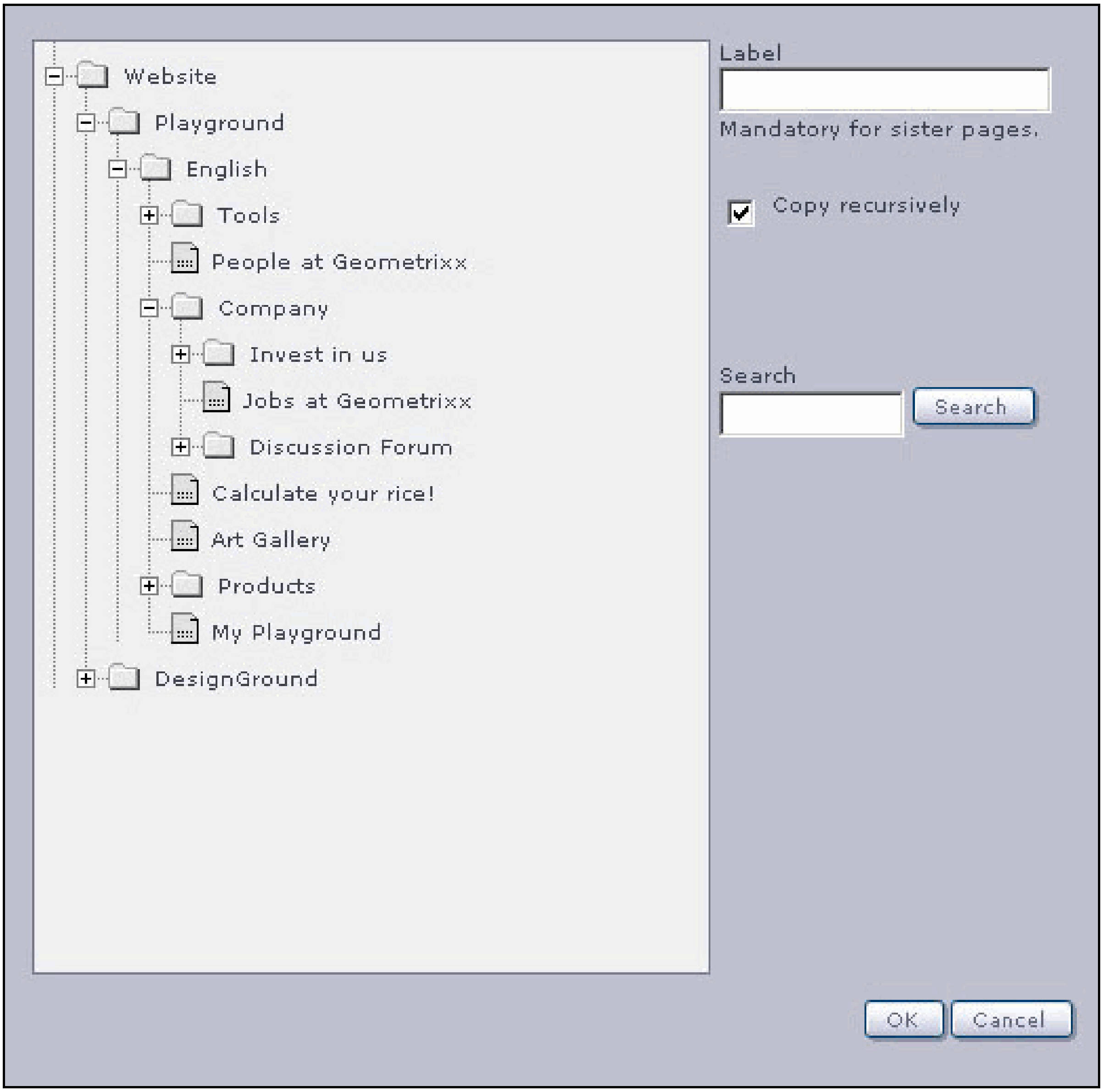
GUI Element	Description
Title	Title of the new page. The title may or may not be displayed in the page. The location and control of the title is dependent upon the template design. The title appears in the page listing pane in the CMS console.

Label	Enter an optional label for the page. The label is used in the URL of this page. If you do not enter a label, then a unique label is created from the title.
Character set	Setting explicitly the encoding when you create the new page, i.e. in the admin after clicking `new` you should select "Central European (ISO)". You can also change the encoding of an existing page in the page properties page.
Template	The list of available templates depends : - What templates are defined in the project. - Location of the page being created. The list only contains those templates that are allowed to be used at the selected location. - Templates may also be hidden from users by revoking access rights.
Symbolic Link	You can create a symbolic link to an existing page in the website. A symbolic link is a pointer to a page that exists elsewhere on the site. Click on the Symbolic Link radio button and indicate the target page to link to. This can be done by entering the full path in the field, or by clicking on the Browse button and selecting the page using the content browser window. Please note that not only does the page content get linked but also all child pages of the linked page. Make sure you dont select a direct ancestor of the symbolic page, otherwise

1.3.2.2. Copying Pages

To copy a page and all its subpages, select the page to be copied by clicking on the checkbox to the left of the document icon and then click the **Copy** button. You can select more than one page by selecting more than one checkbox.

This will open a **content browser** dialog in a separate window:



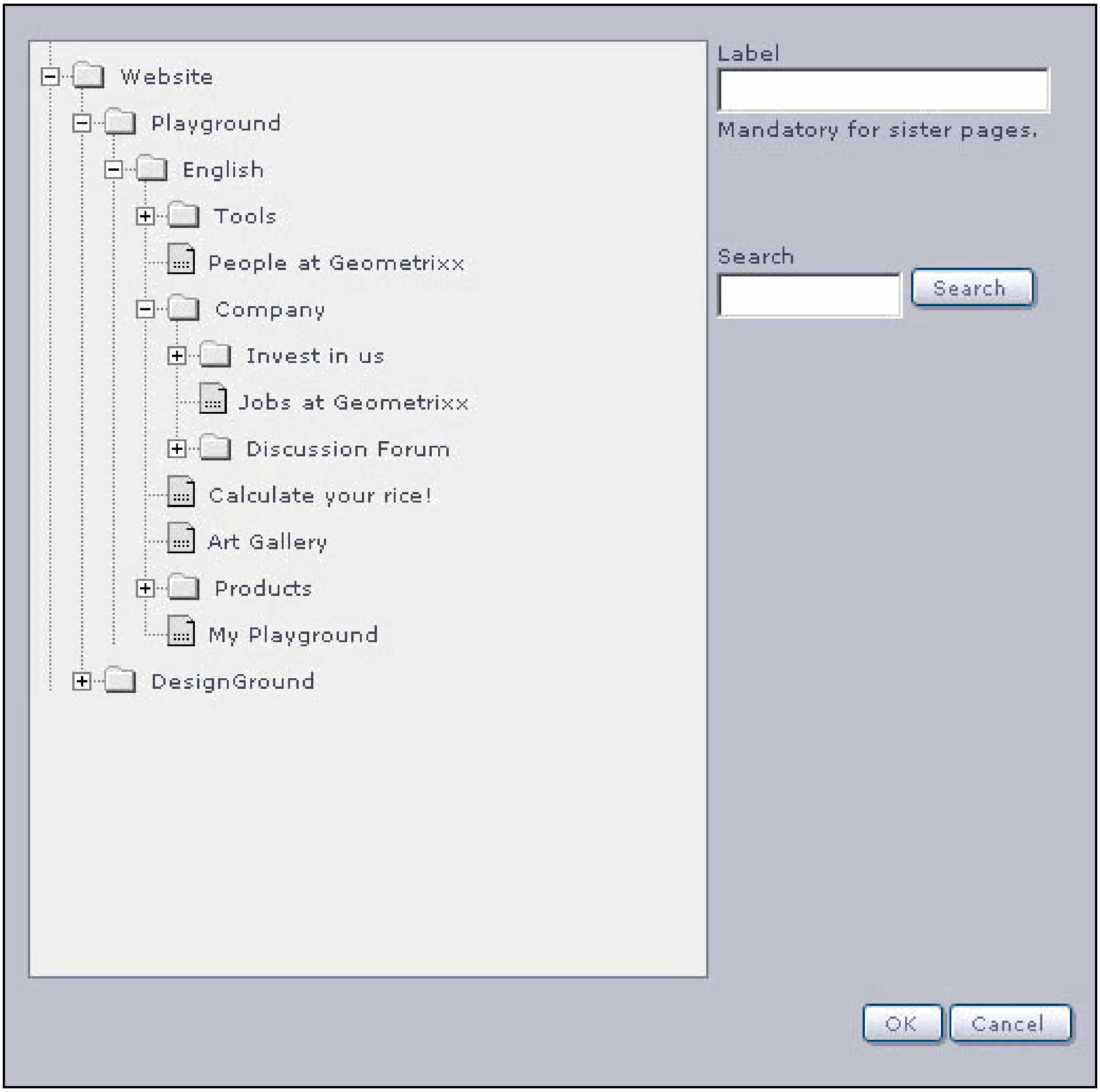
GUI Element	Description
Tree View	The main section of this window displays the same content tree structure as in the navigation pane of the Site view.

	Navigate through this tree and select the page under which the copied page is to be placed.
Label	A copied page cannot have the same label as any of its sibling pages at the destination. Therefore, if there is a danger of a page label clash, a new label for the copied page must be defined. Please note that this label is only applied to the first of the copied pages. If there are more pages that are in conflict with existing pages they will not be copied.
Copy recursively	By default only the selected pages itself get copied. By activating this checkbox their subpages get copied as well.
Search	The search function is used to search for a target parent page containing a specific word. The search function lists all the pages that match the search criteria.
OK	After selecting the target parent page in the tree, select **OK** to continue. An alert box will ask for confirmation.
Cancel	Aborts the complete copy action and closes the dialog.

1.3.2.3. Moving Pages

To move a page and all its subpages, select the page to be moved by clicking on the checkbox (to the left of the document icon), then click the **`Move`** button. You can move more than one page by selecting more than one checkbox.

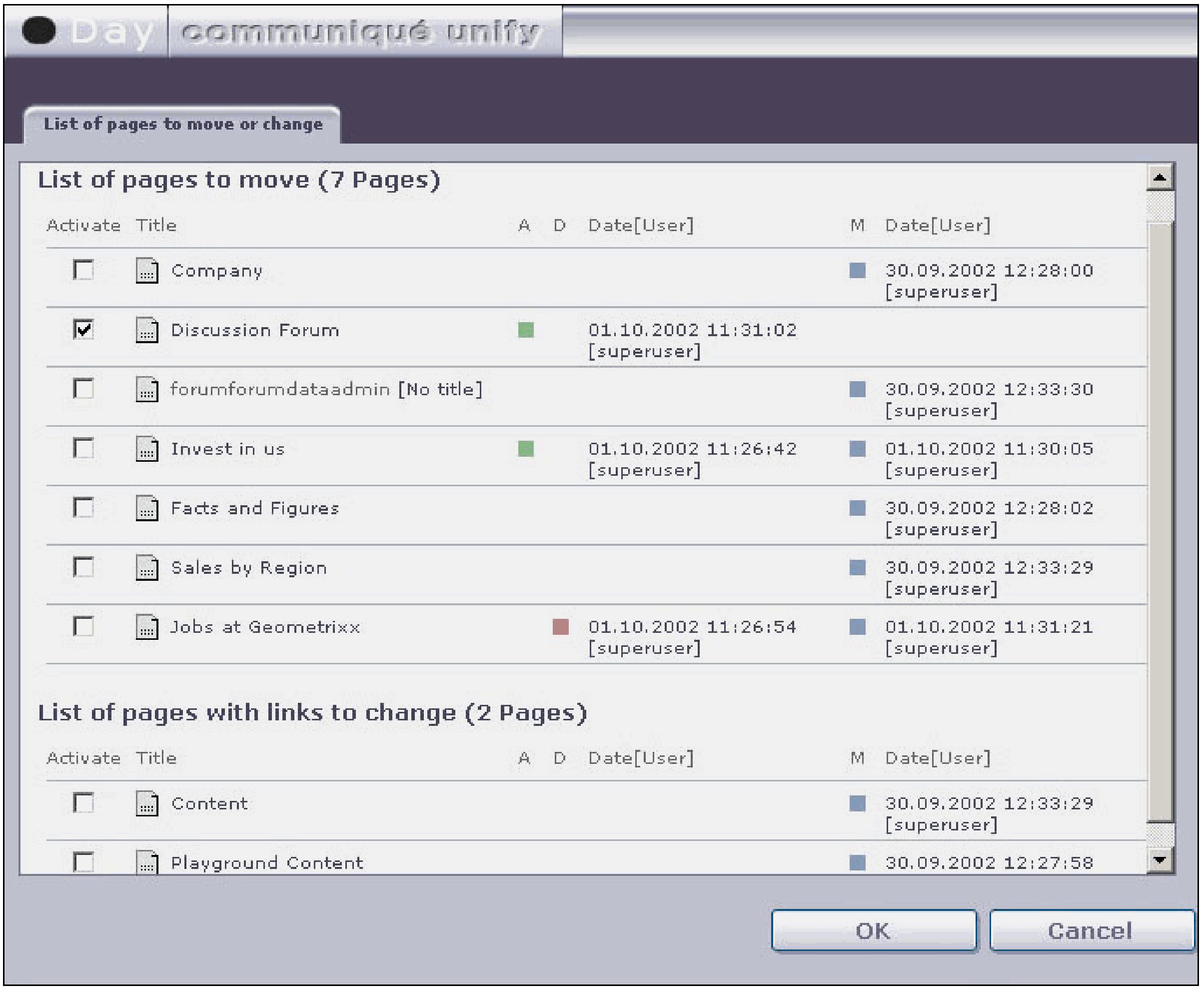
This will open a **`content browser`** dialog in a separate window:



GUI Element	Description
Tree View	The main section of this window displays the same content tree structure as in the navigation pane of the site view.

	Navigate through this tree and select the page under which the moved page is to be placed.
Label	A moved page cannot have the same label as any of its sibling pages at the destination. Therefore, if there is a danger of a page label clash, a new label for the moved page must be defined. Please note that this label is only applied to the first of the moved pages. If there are more pages that are in conflict with existing pages they will not be moved.
Search	The search function is used to search for a target parent page containing a specific word. The search function lists all the pages that match the search criteria.
OK	After selecting the target parent page in the tree select **OK** to continue. The content browser dialog will close and a list of all pages to be moved and pages with links to the moved pages is shown. See below for details.
Cancel	Aborts the complete move action and closes the dialog.

Clicking the **OK** button closes the content browser and opens a new dialog:



GUI Element	Description
List of Pages to Move	A list of all pages and subpages that have been selected for the move operation. For each page in the list the same information as in the page listing is shown. Each page has a checkbox displayed in the **`Activate`** column. If selected, the page will be replicated automatically to the defined subscribers after completion of the move operation.
List of Pages with links to Change	This is a list of all content pages that have links pointing to one of the pages that are to be moved. The links will automatically be adapted after the move operation is completed.

	Each page has a checkbox displayed in the **`Activate`** column. If selected, the page will be replicated automatically to the defined subscribers after completion of the move operation.
OK	This will open a confirmation dialog. After `OK` is selected: - The move operation takes place. - The pages with links to the moved pages get updated. - The pages selected for automatic activation get replicated to the subscribers.
Cancel	Aborts the move operation and closes the dialog.

1.3.2.4. Activating Pages

The **Activate** action allows you to replicate content pages to other Communiqué instances or applications.

To activate a page, first select the page(s) in the page listing by clicking on the checkbox to the left of the page entry, and then click the **`Activate`** button.

A message box will be displayed to confirm the choice. Clicking **`OK`** replicates the page to the defined subscribers; clicking **`Cancel`** will abort the operation.

Once the page is activated, the **Activated/Deactivated** indicator in the page listing pane changes to a **green square**.

Replicating a page will also automatically create a version snapshot of the page. Using the Restore function you can then restore previously activated versions of the page.

Attempting to activate a page that has already been activated has no effect.

In the Tools dialog there is a more advanced activation control that allows the activation not just of sets of pages on the same level, but of entire content subtrees.

1.3.2.5. Deactivating Pages

After a page has been replicated to a subscriber using the Activate function (signified by a green square in the **`A`** column of the page listing), you may at some point wish to remove it from the subscriber(s). This is done by deactivating the page.

To deactivate a page, first select the page(s) by clicking on the checkbox to the left of the page entry, and then click the **`Deactivate`** button.

A message box will be displayed to confirm the choice. Clicking **`OK`** deletes the page on the subscribers, clicking **`Cancel`** will leave the page state unchanged.

Once the page has been deactivated, the **Activated/Deactivated** indicator in the page listing pane changes to a **red square**.

Note that attempting to deactivate a page that is currently not active has no effect.

1.3.2.6. Deleting Pages

Pages can be permanently removed from ContentBus repository by deleting them. To delete a page, first select the page(s) in the page listing by clicking on the checkbox to the left of the page entry, and then click the **`Delete`** button.

A message box will be displayed to confirm the choice. Clicking **`OK`** deletes the selected page(s); clicking **`Cancel`** will leave the page unchanged.

The delete action creates a **version snapshot** of the page before deleting it. So you can use the Restore function to get back the deleted or even older versions of the page.

If there are active subscribers, than the page will also be deleted on this subscribers.

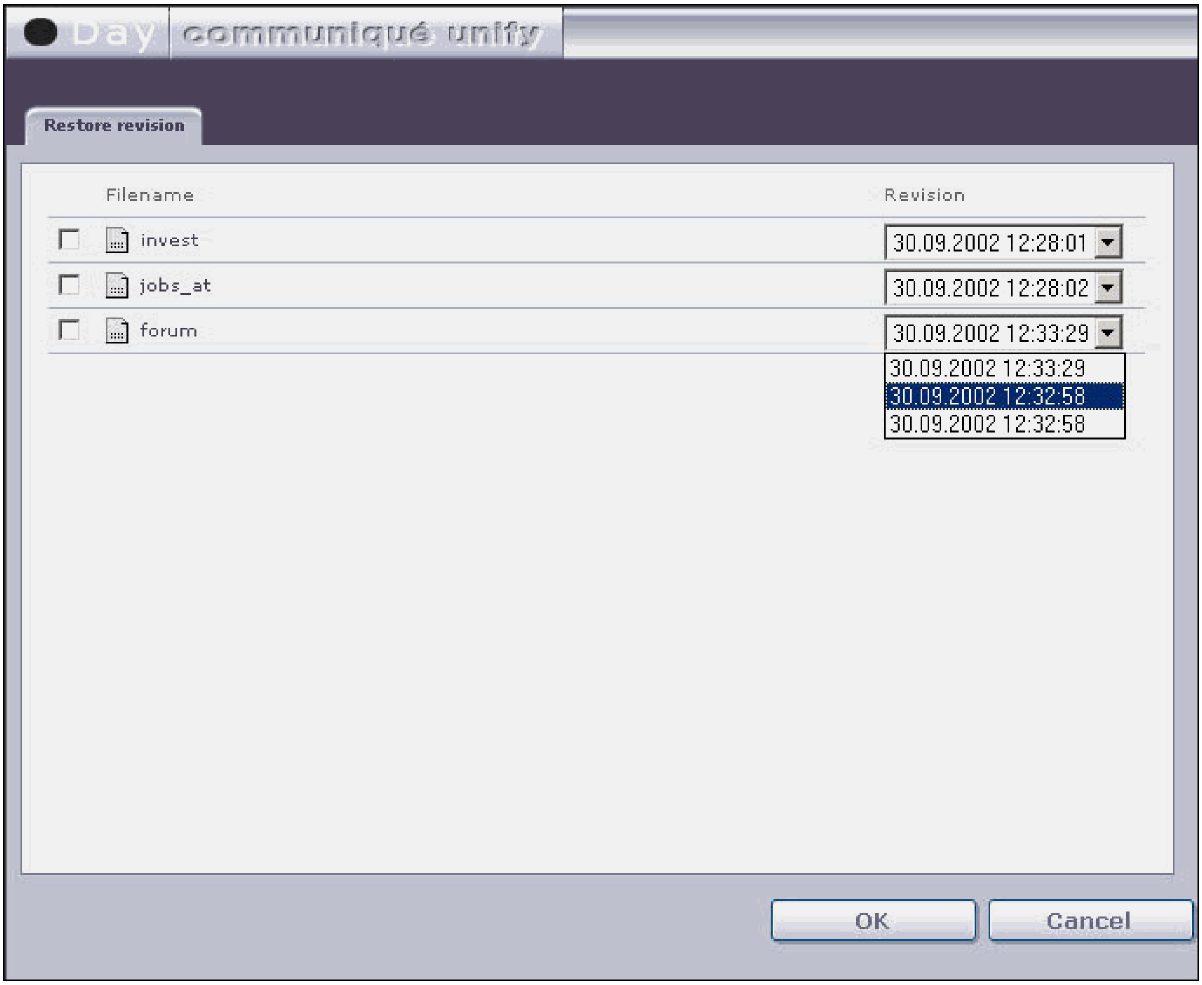
1.3.2.7. Restoring Pages

The CMS creates a snapshot of a content page on two occasions:

- When the page gets replicated using the activate action.
- When the page gets deleted from the ContentBus repository.

Versioning is a feature of the ContentBus. There are no limitations on the number of versions.

To restore previous versions of pages(s) click on the **`Restore...`** button. The CMS will show a list of all pages currently visible in the page listing with a list of available versions for each:



GUI Element	Description
Checkbox	Used to select all the pages where a version is to be restored.
Filename	The page label. Pages that have been deleted are shown in light gray.

Revision	If multiple versions of a page are available, a drop down list displays the creation date and time for each version.
OK	To restore a version, select the pages you want to restore using the checkbox and select the version in the revision drop down list, then click on **`OK`**. A confirmation dialog will appear. By clicking again on the **`OK`** button the versions of the selected pages will be restored in the ContentBus repository.
Cancel	This will abort the restore operation and close the dialog.

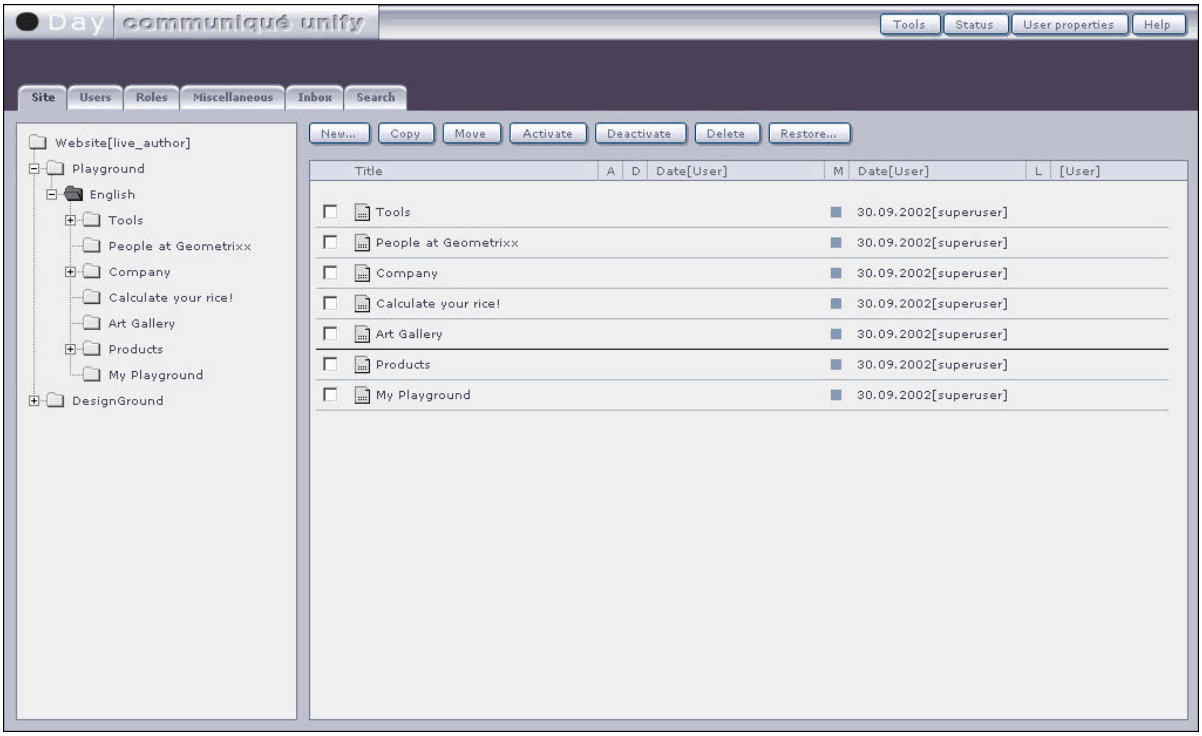
The **`Modified`** Indicator in the page listing pane will appear when the content of the page is changed.

In Tools you will find an advanced restore function that allows you to restore not only pages that are on the same level, but also complete content tree branches depending on the version date.

In addition, you an also use the VersionWarp tool to individually restore previous version of the current page. The **VersionWarp** tool is found in the Page Properties dialog of each page.

1.3.2.8. Ordering Pages

You can change the **order of the pages** within a given hierarchy level. To do this simply click and hold the document icon of the page you want to move and drag it up or down. A bold line in the page listing will show where the page is going to be placed the moment you release the mouse button:



After releasing the mouse button you will be asked to confirm your choice. Click on **OK** and the page will be placed in its new position.

1.3.2.9. Locking Pages

Locked pages can only be edited by the author of that page. Locking is mainly used in conjunction with the workflow process (Thats why this action is not found in the Site view).

A page can be locked in two ways: either using the **Lock** button in the toolbar of a page:

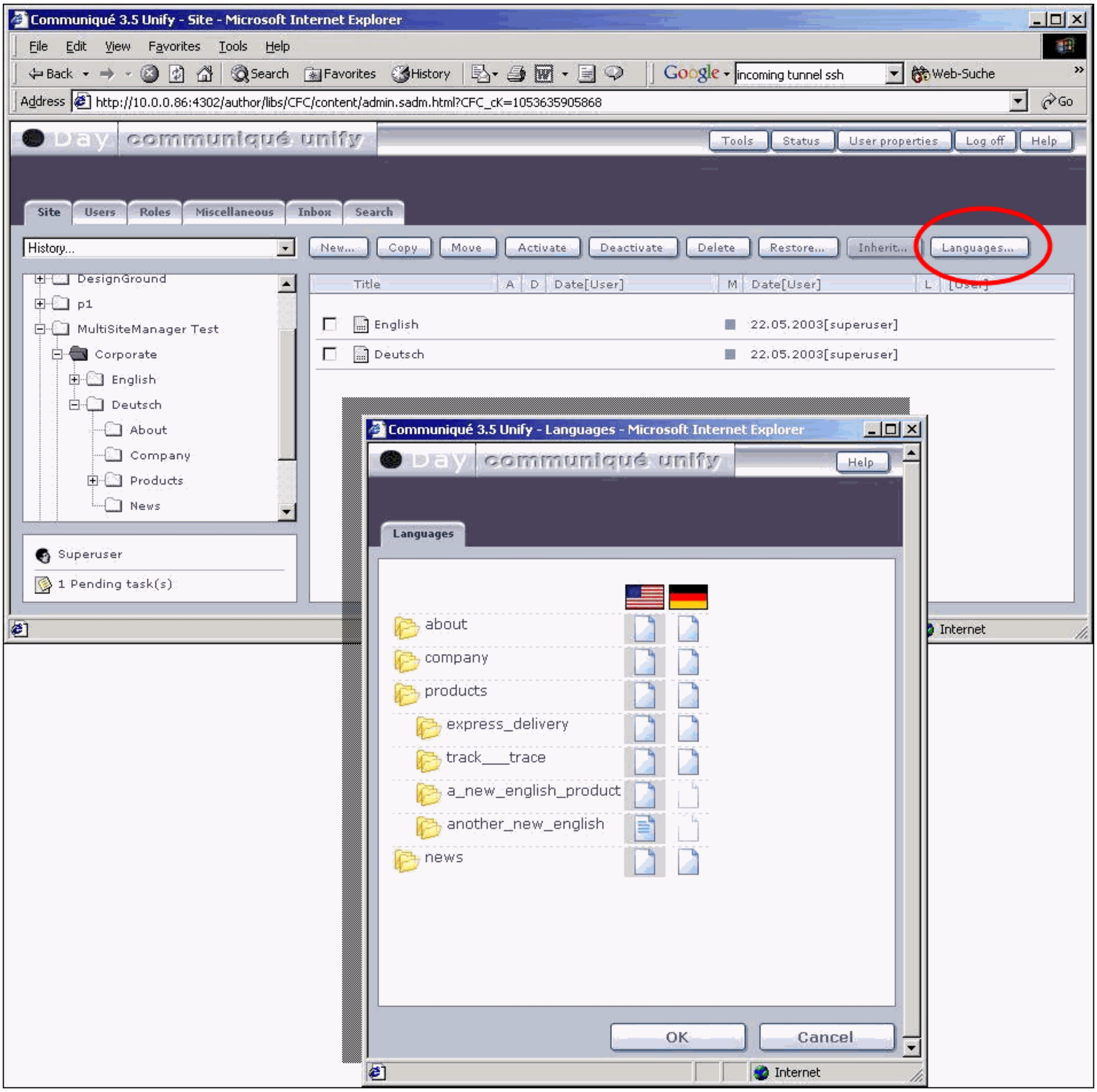
or in the inbox view:

If the page is locked, the buttons will change:

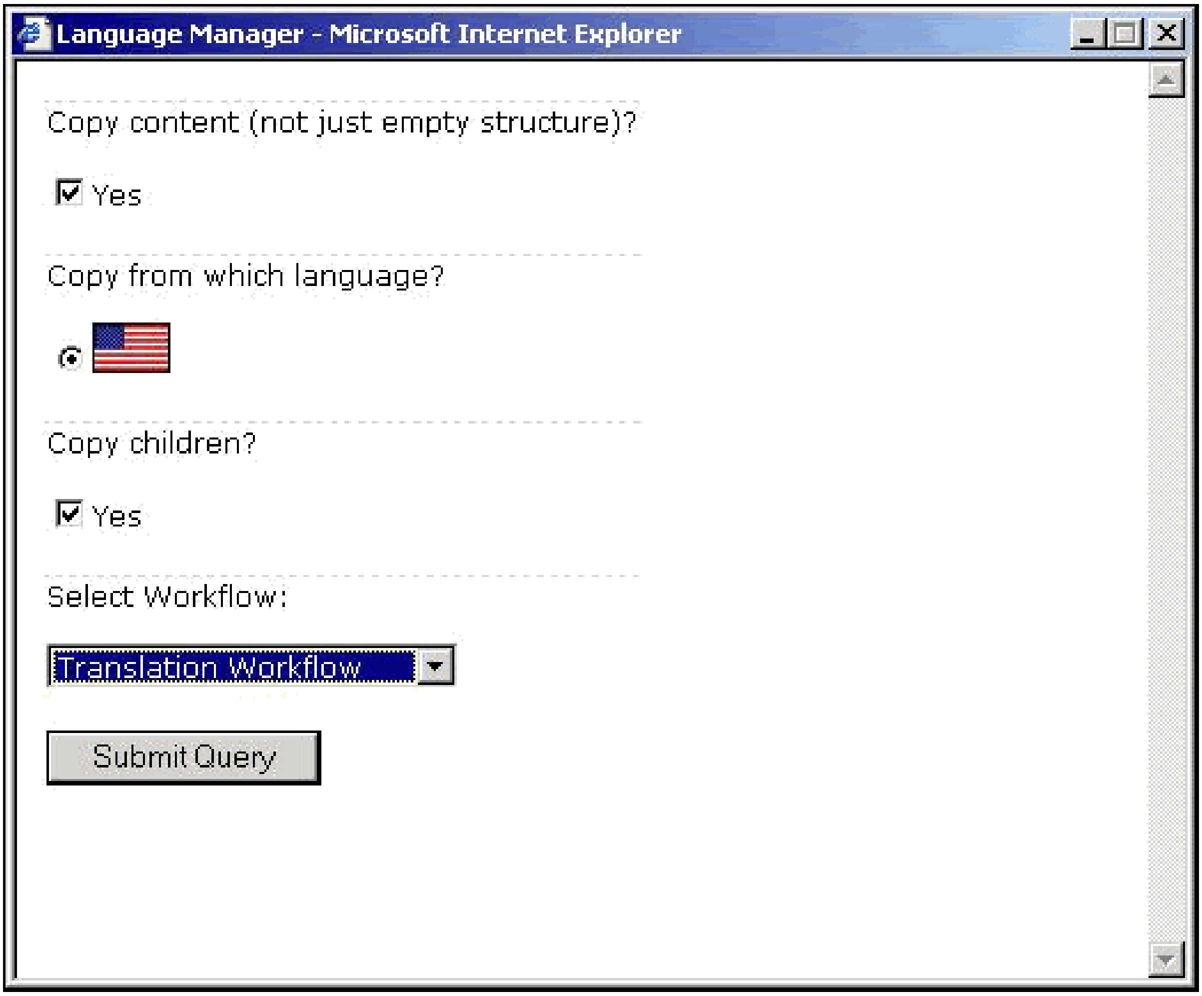
- The user that locked the page is presented with an **Unlock** button to release the lock.
- All other users are presented with a button labeled **Break Lock** to be able to remove the lock in exception situations.

1.3.2.10. Language Manager

The language coherence view allows the making of corrections if the language trees have diverged. This is done by copying newly created pages with or without their respective content from one tree to the other.



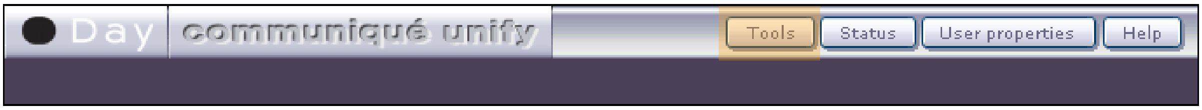
By clicking on an empty icon, the user is prompted with a dialog that shows the following options:



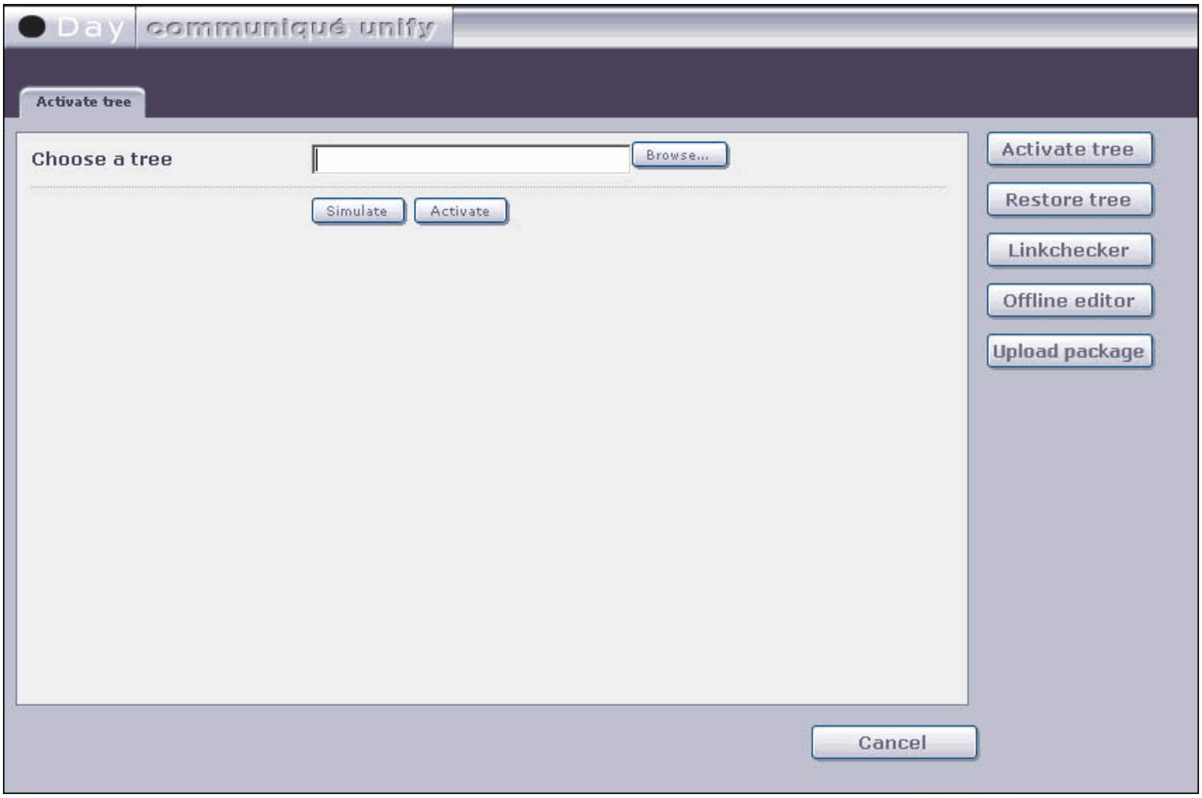
- Copy Content: by default only the structure is copied. But, depending on the applied workflow, it might be useful to copy the content in the original language so that the translator can work directly on the original
- Selecting the original language to copy from is important if the content already exists in multiple languages.
- Copy Children: By default only a single page is copied but in some cases it is useful to be able to copy an entire structure rather than doing it page by page
- Select Workflow: depending on the organisation, it might be useful to have a workflow attached to the newly created pages in the destination language, this might be useful, for example, if a particular tree has to be translated into a newly supported language.

1.3.3. Advanced Content Pages Management Functions

Additional advanced functions can be found in the **Tools** dialog:



Clicking the **Tools** button brings up the dialog:



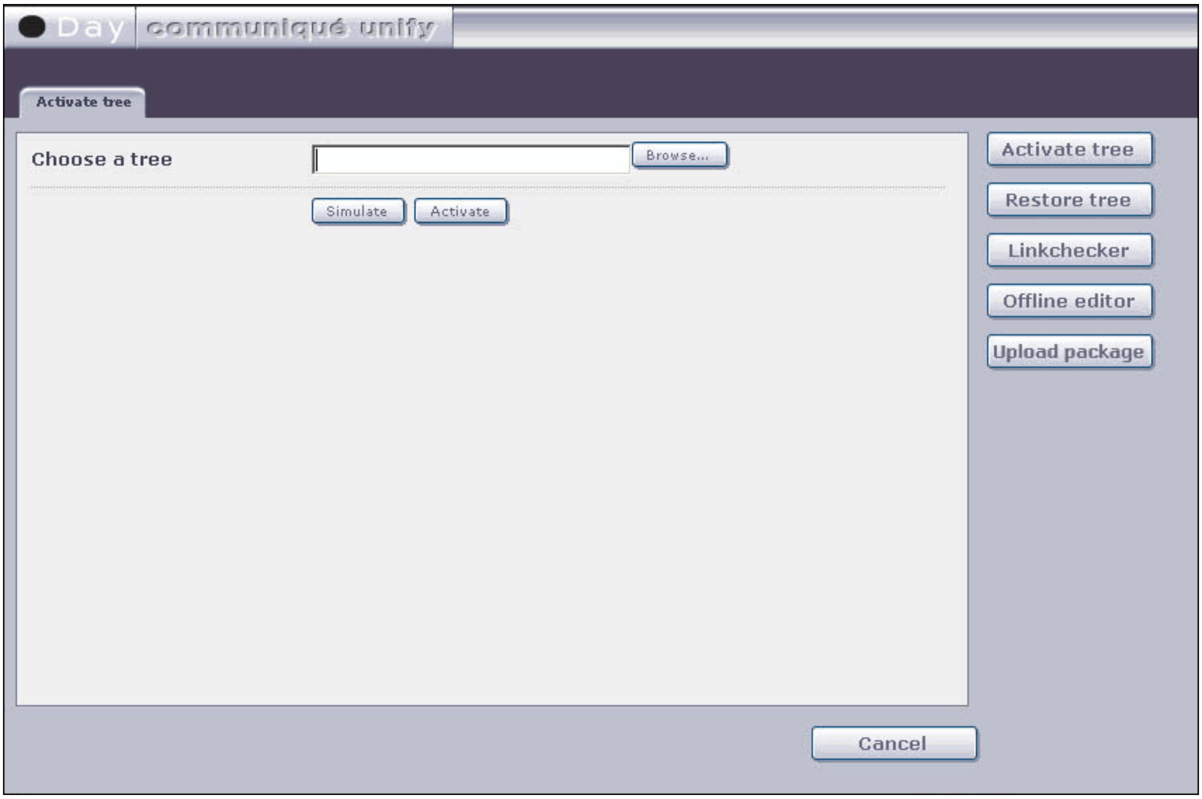
Advanced functions are listed on the right side of the dialog. The center pane of the dialog will change according to the selected function.

GUI Element	Description
Activate Tree	This tool allows you to replicate an **entire section of the content tree** to the defined subscribers.
Restore Tree	Using this tool you can **restore complete sections of the content tree**, by defining the date you want to go back to.
Linkchecker	While the internal links are checked automatically by the CMS, the

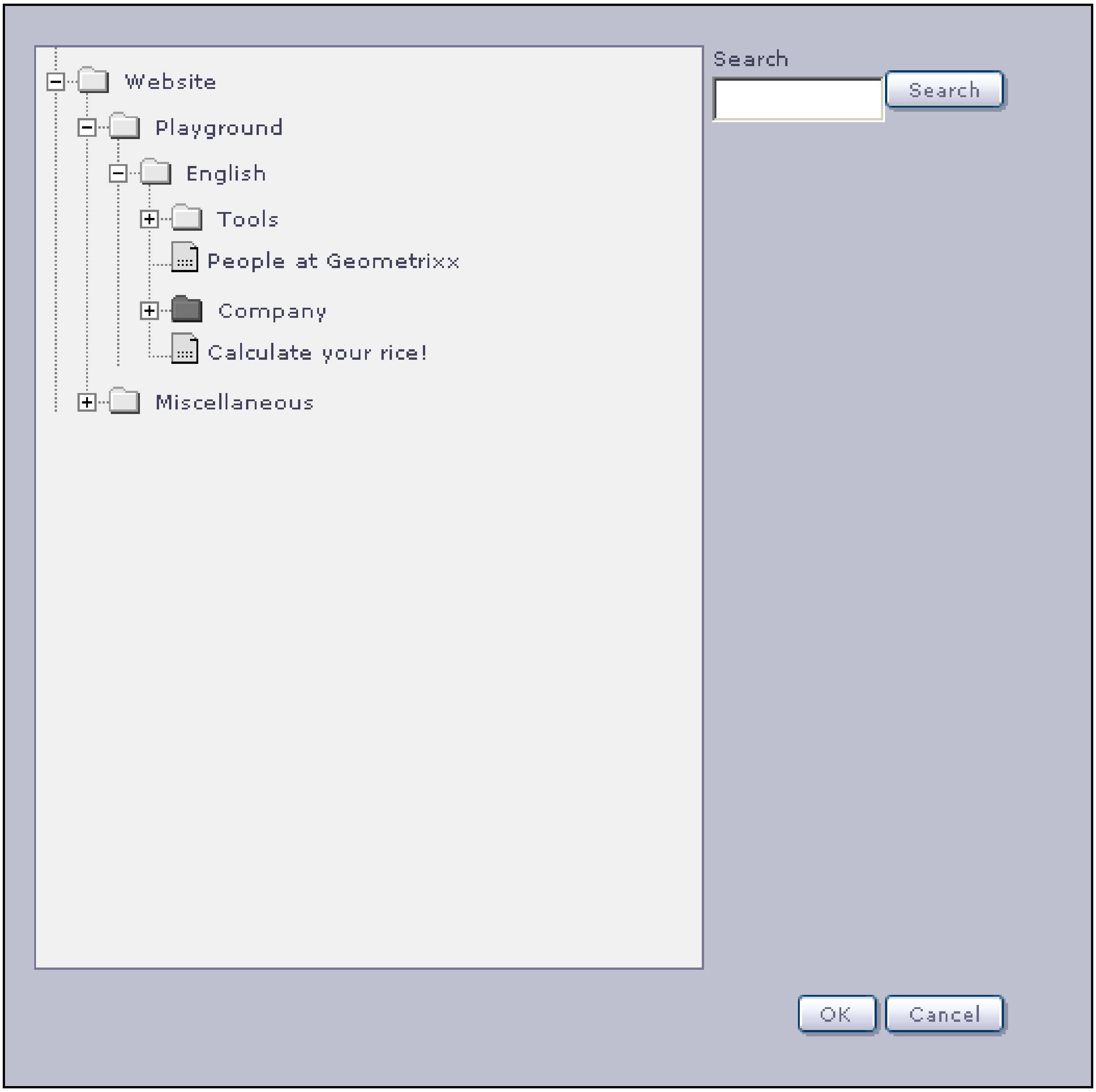
	external links are not. Using this tool you can let the CMS **validate all external links** found in the content pages.
Offline Editor	The offline editor allows the **importing of content stored as RTF files**. Practically speaking it means you can create the content in MS Word, save it as a file in `.rtf` format and then use the importer to automatically convert the file to content pages.
Upload Packages	Allows you to **upload and extract packages** created previously e.g. on other Communiqué instances.
Cancel	Closes the `Tools` dialog.

1.3.3.1. Activate Tree

Although you can replicate single pages and groups of pages in the same level using the Activate button, it is sometimes more efficient to activate entire branches of the website in a single operation using the **`Activate Tree`** tool:



Clicking the **`Browse#`** button opens a content browser where you can select the **root of the content subtree** you wish to activate:



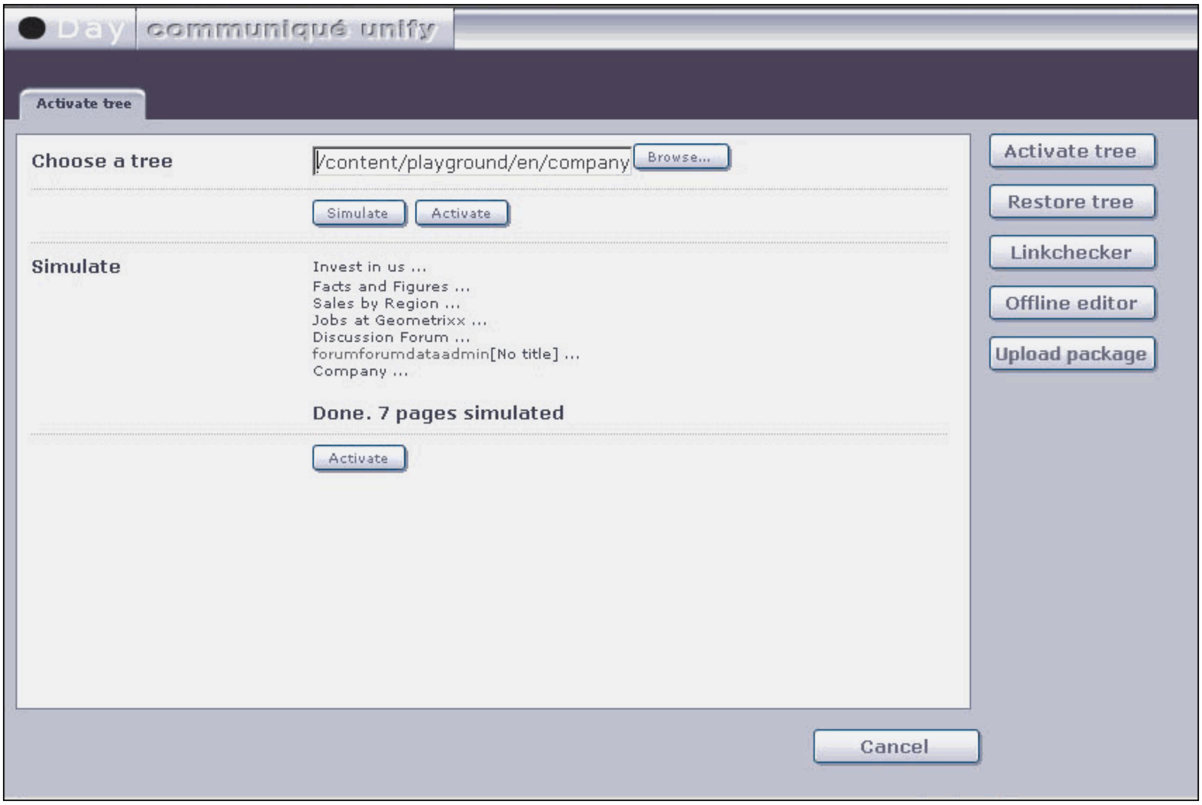
GUI Element	Description
Content Tree	The main section of this window displays the same content tree structure as the navigation pane of the Site view. Navigate through this tree and select the root page of the content subtree you want to activate.
Search	The search function is used to search for a target parent page containing a specific word. The search function lists all the pages that match the search criteria.
OK	Clicking **OK** confirms the selection and closes the content browser dialog. The name of the selected page will be shown in the input field of the

	`Activate Tree` dialog.
Cancel	Aborts the selection process and closes the content brower dialog.

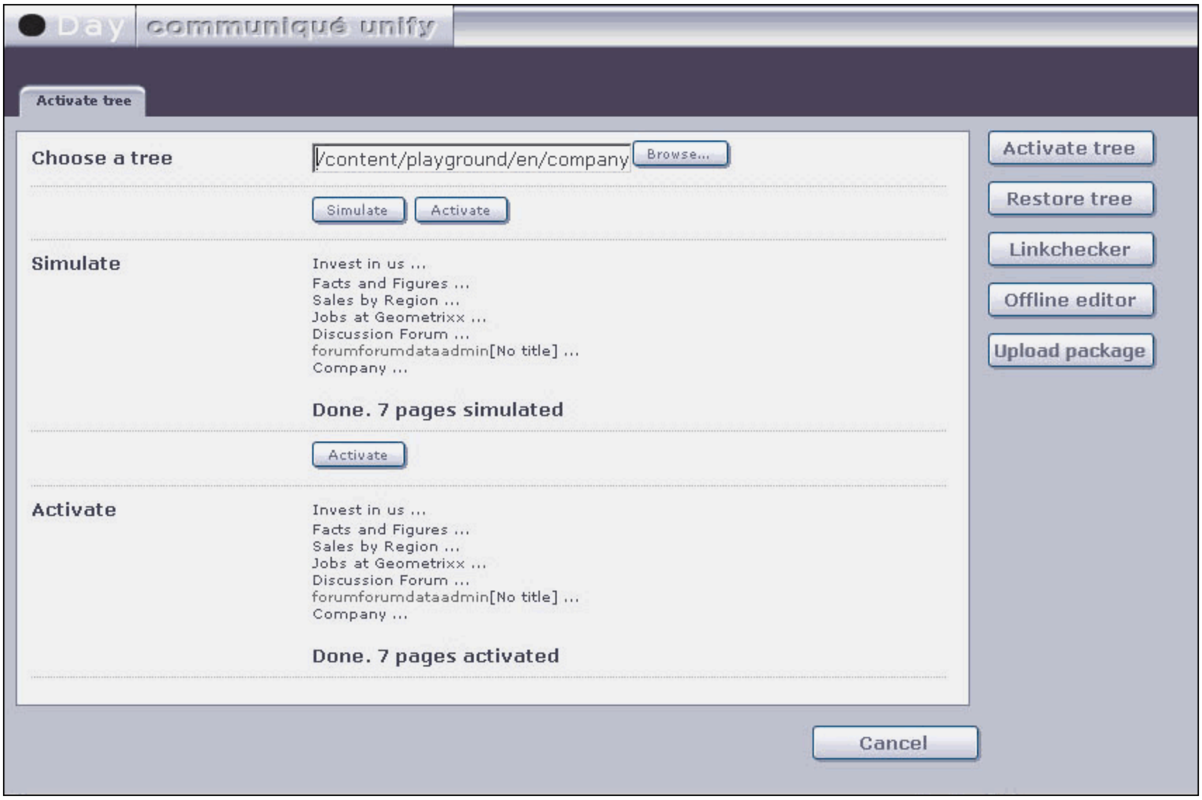
After the root page is selected, the replication of the branch can be executed using the **`Activate`** button.

You can simulate activation by selecting the **`Simulate`** button. This allows testing to ensure that the right pages are activated as expected.

Clicking the `Simulate` button brings up this dialog:



The titles of the simulated replicated pages are shown along with the total number of pages. If you chose **`Activate`** the same output occurs but this time the pages really do get replicated to the subscribers:

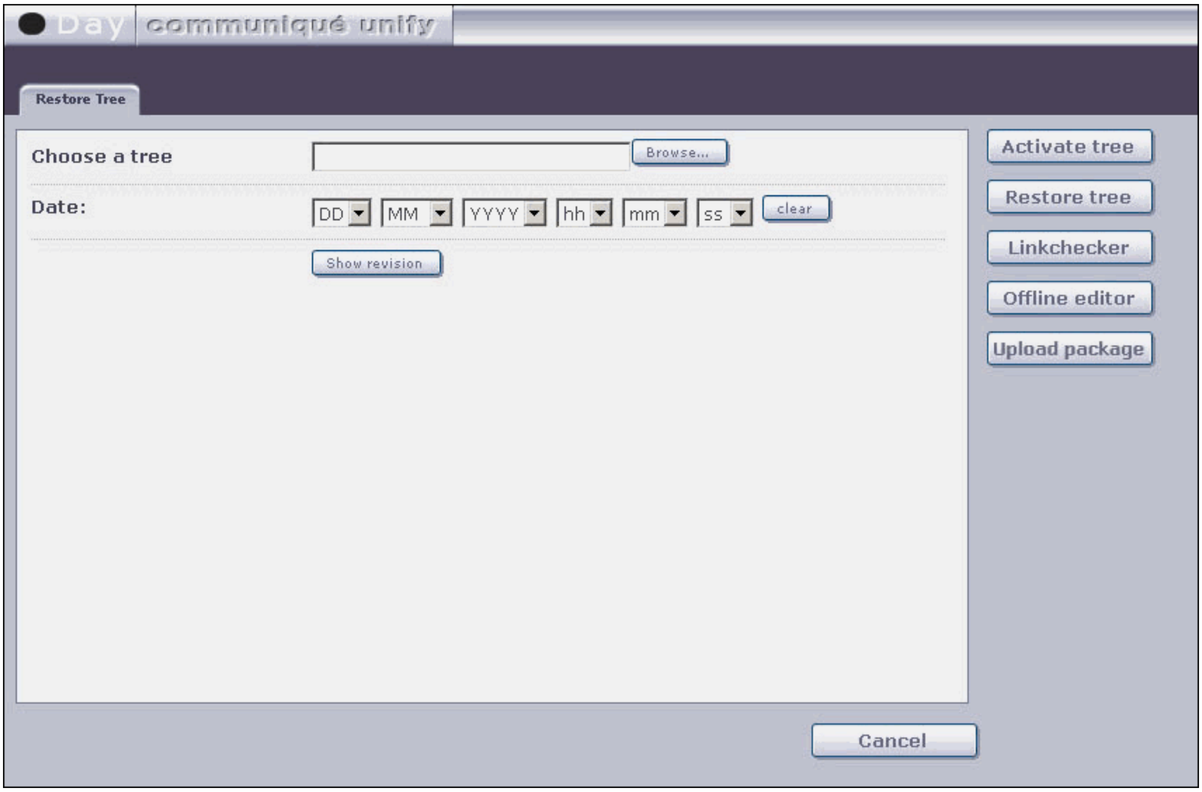


The list of activated pages is updated each time a new page is activated. The list output may or may not be regularly updated, depending on the browser used.

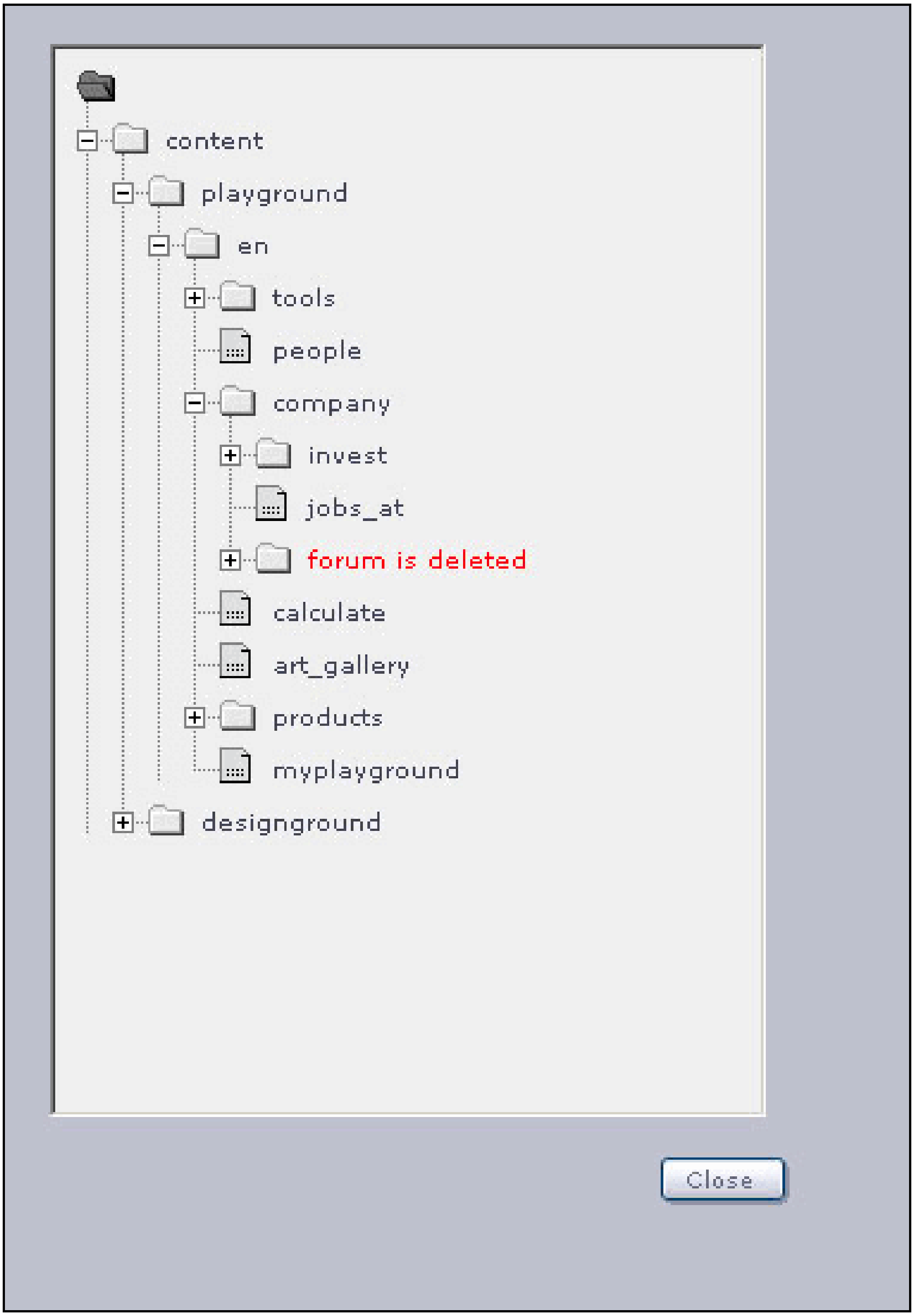
If the browser does not update the list while activating a large number of pages, do not assume the system is not functioning properly. Instead the browser may update the dialog after all the pages have been activated. Please be patient.

1.3.3.2. Restore Tree

Although you can restore previously activated or deleted versions of a page by using the Restore button in the Site view, or restore older version using the VersionWarp in the Page Properties dialog, it may sometimes by useful to restore a previous version of a complete content tree branch. For this you can use the **`Restore Tree`** function:



Clicking on the **`Browse#`** button opens the **revision browser:**



The revision browser shows a content tree containing all pages and their corresponding versions, including pages that have been previously deleted. The deleted pages are marked in red.

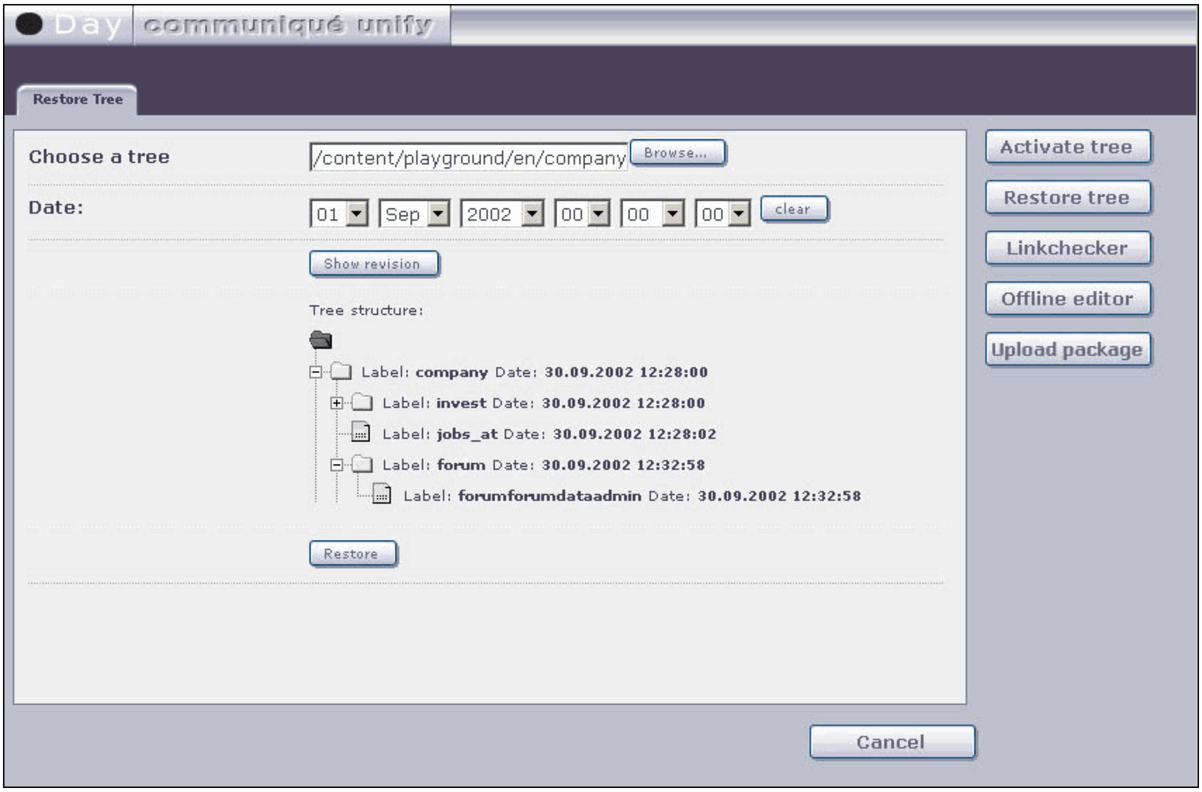
The tree shows the label names and each version of each page.

To restore a branch of the hierarchy, **select the root page of the tree branch you want to restore**

and click on **`Close`**. The handle of the root page will be shown in the input field of the `Restore Tree` dialog.

Next, the **rollback date and time must be defined** in the date control. The revision search algorithm finds the page revisions that are **closest (either before or after)** to the defined date and time.

After clicking on **`Show Revision`**, the result set is shown in the form of a content tree:



For each page the following information is shown:

- The label of the page.
- The date and time of the revision found for the page. If the page has had no revisions, the date is empty and the page will remain unchanged.

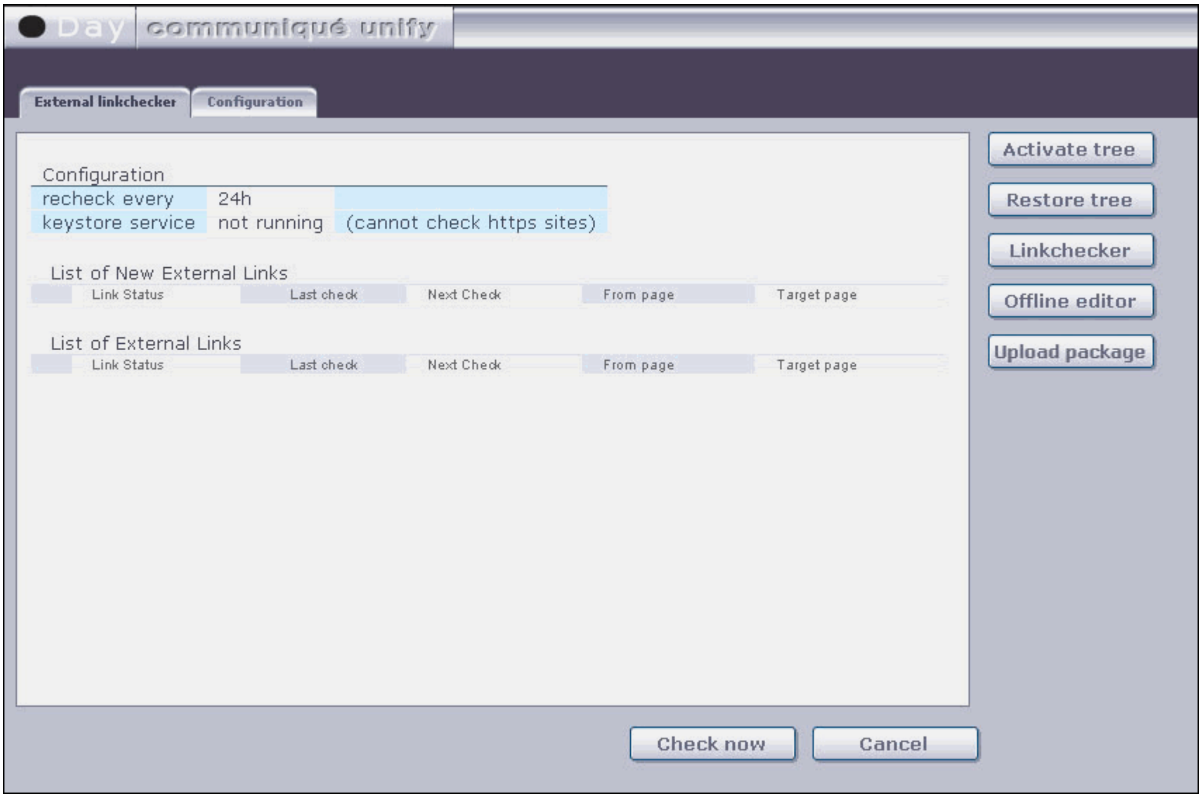
You can expand or collapse the content tree using the `+/-` symbol next to the page icons.

Clicking on the **`Restore`** button below the results tree will restore the found versions for the selected tree branch.

1.3.3.3. Linkchecker

While all internal links from page to page are automatically checked, and if necessary fixed, by the CMS, the external links have to be checked manually.

The linkchecker tool simplifies this process. It checks all external links found in the content pages, and generates a list of the returned HTML status codes:



The linkchecker starts the moment you click on the **Linkchecker** button on the right side of the Tools dialog.

It searches all external links in the content pages and tries to connect. All checked links get stored and keep their status for a configurable time.

In the above example the status remains valid for the next 24 hours. This means if you restart the linkchecker within the next 24 hours these links will not be rechecked.

To **force** a rechecking of the links, select the links you want to check and click on **`Check now`**. If you click on `Check now` without selecting links, all links get rechecked.

Following is a list of all HTTP Status codes and their meaning according to RFC 2616:

`100 Continue`

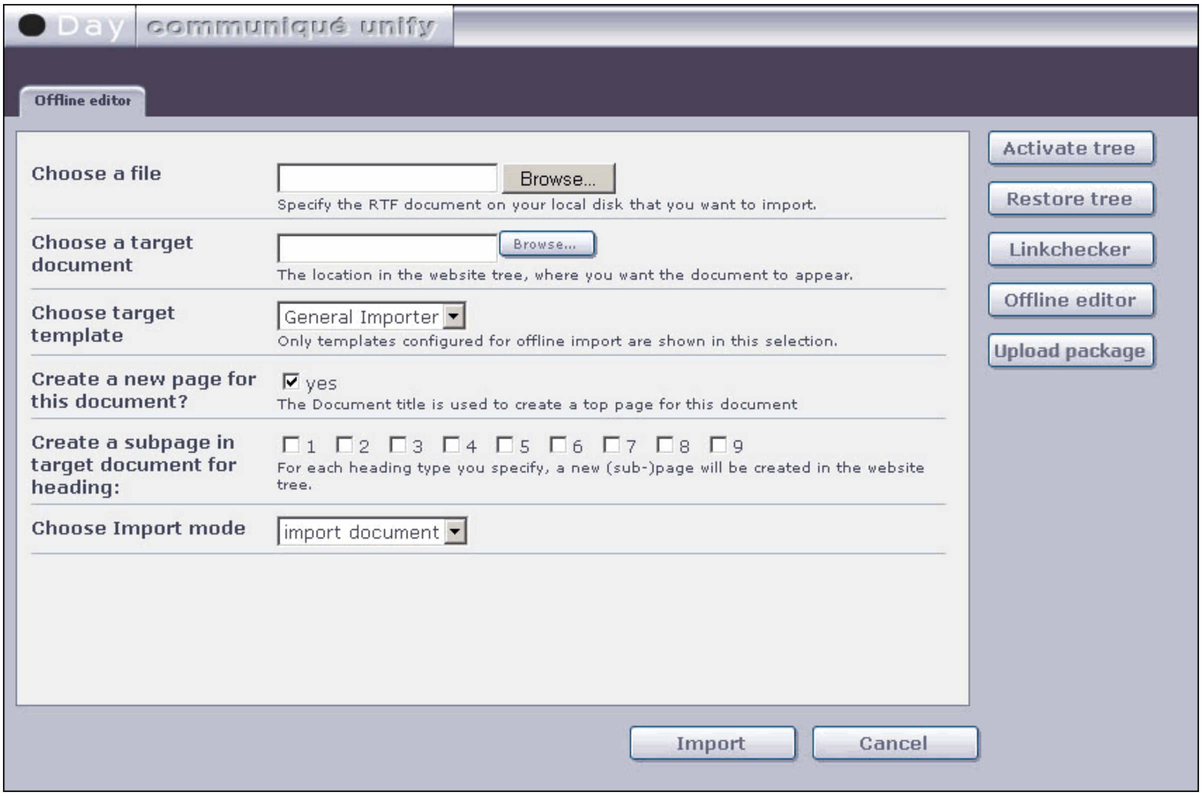
```
101 Switching Protocols
200 OK
201 Created
202 Accepted
203 Non-Authoritative Information
204 No Content
205 Reset Content
206 Partial Content
300 Multiple Choices
301 Moved Permanently
302 Found
303 See Other
304 Not Modified
305 Use Proxy
307 Temporary Redirect
400 Bad Request
401 Unauthorized
402 Payment Required
403 Forbidden
404 Not Found
405 Method Not Allowed
406 Not Acceptable
407 Proxy Authentication Required
408 Request Time-out
409 Conflict
410 Gone
411 Length Required
412 Precondition Failed
413 Request Entity Too Large
414 Request-URI Too Large
415 Unsupported Media Type
416 Requested range not satisfiable
417 Expectation Failed
500 Internal Server Error
501 Not Implemented
502 Bad Gateway
503 Service Unavailable
504 Gateway Time-out
505 HTTP Version not supported
```

In contrast to invalid internal links, **external invalid links are not removed from the webpage**. Therefore, before you activate a page you should make sure that the external links are valid.

If the Communiqué instance is not configured to open **https connections** as a client, it will not be able to check https links. An according message will appear on top of the dialog stating that the keystore service is not running and therefore https site can't be checked.

1.3.3.4. Offline Editor

The offline editor allows you to specify an RTF File to import to generate new web pages in your web site:



GUI Element	Description
Choose a file	Clicking on the **Browse** button opens a **File Open** dialog to select the RTF file on the local disk to be imported.
Choose a target document	Clicking on the **Browse** button opens a content browser to select the page to which the generated pages will be added as child pages.
Choose a target template	Select the template that should be assigned to each of the generated pages from the drop down box. Only those templates that have been especially configured for offline import are listed.
Create a new page for this document?	If this checkbox is set, the first page generated will be a title page containing the document's title and all other pages will be generated as children of it. Otherwise the pages are created depending on the next setting (see below).

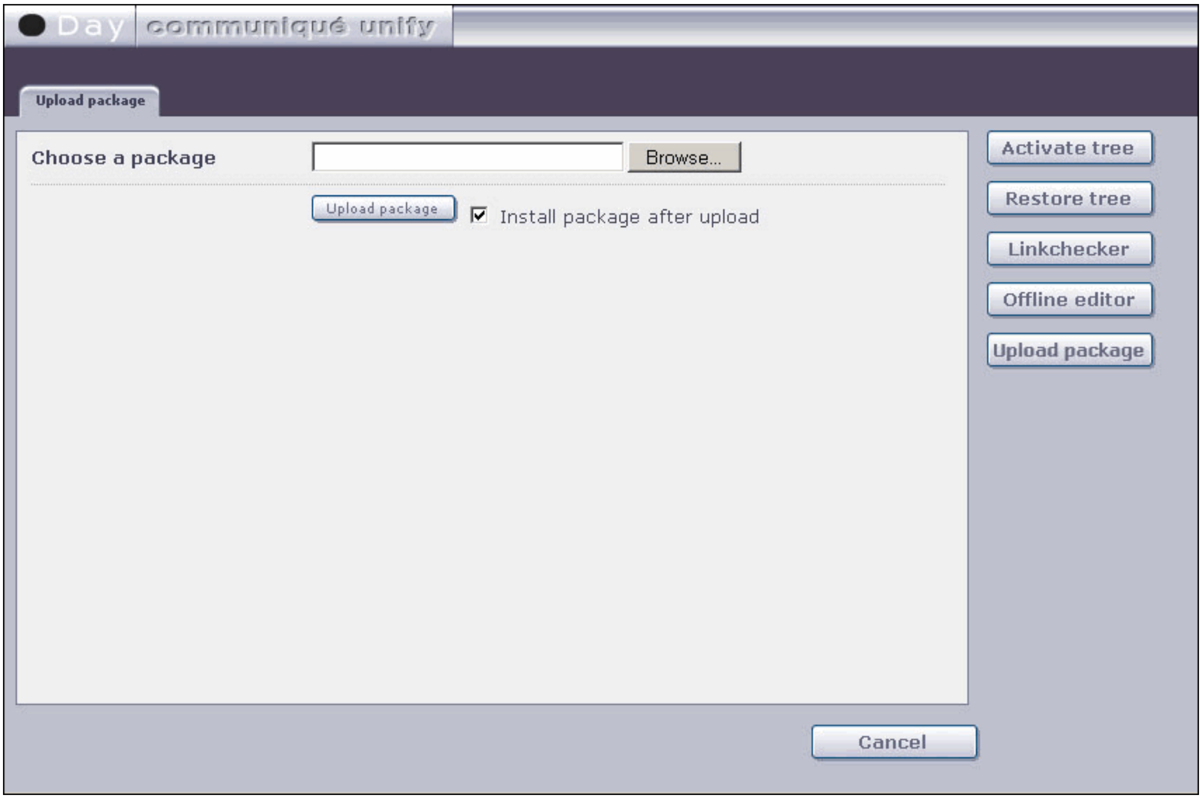
Create a sub page in target document for the heading?	If the document contains multiple levels of headings, this option is used to split the imported document into separate subpages. Select the heading levels at which you want the split to occur by selecting the relevant check boxes. Headings that are not used for starting a new page will be displayed as titles in the parent page. Headings that are used to start a new sub page will become the title of the new subpage.
Choose import mode	There are three options for import mode: - **`import document`**: This will actually import the document and create the web pages. - **`dry run`**: This will simulate the import showing information about what would be created. - **`preview content`**: This shows all the content that will be imported.

After setting up the import settings clicking on the **`import`** button will start the process in the selected mode.

1.3.3.5. Upload package

You can create a package and download the package file to your local system. This is usefull to create a backup or upload the package on a different Communiqué system to update it.

In this dialog you can upload such a package file :



GUI Element	Description
Choose a Package	Use the **`Browse...`** button to open a file dialog and locate the package on your local system. Packages are stored by default using the following naming rule : <package_label>.<YYYYMMDD>.cq
Upload Package	This will upload the package file and create the package page in the packages section.
Install package after upload	If checked the content of the package will directly be unpacked and placed in the contentbus repository after uploading.

1.3.4. Editing Page Content

A page can be be previewed in a seperate window by clicking its icon in the Site view tab of the CMS console. The template associated with the page determines how the content is presented. Templates are either:

- **CMS Templates** that are part of the CMS application, e.g. all pages used in the `Miscellaneous` section use CMS templates.
- **Application Templates** that are part of another template-based application e.g. forum, commerce, auction that have been licensed for this project.
- **Project Templates**, created by Day Software, Day Partners or the customer itself to be used with a particular project only.

If you try to open an page that has no template assigned you will get the following error :

```
Forbidden
The requested URL ...html resulted in an error.
```

This happens if:

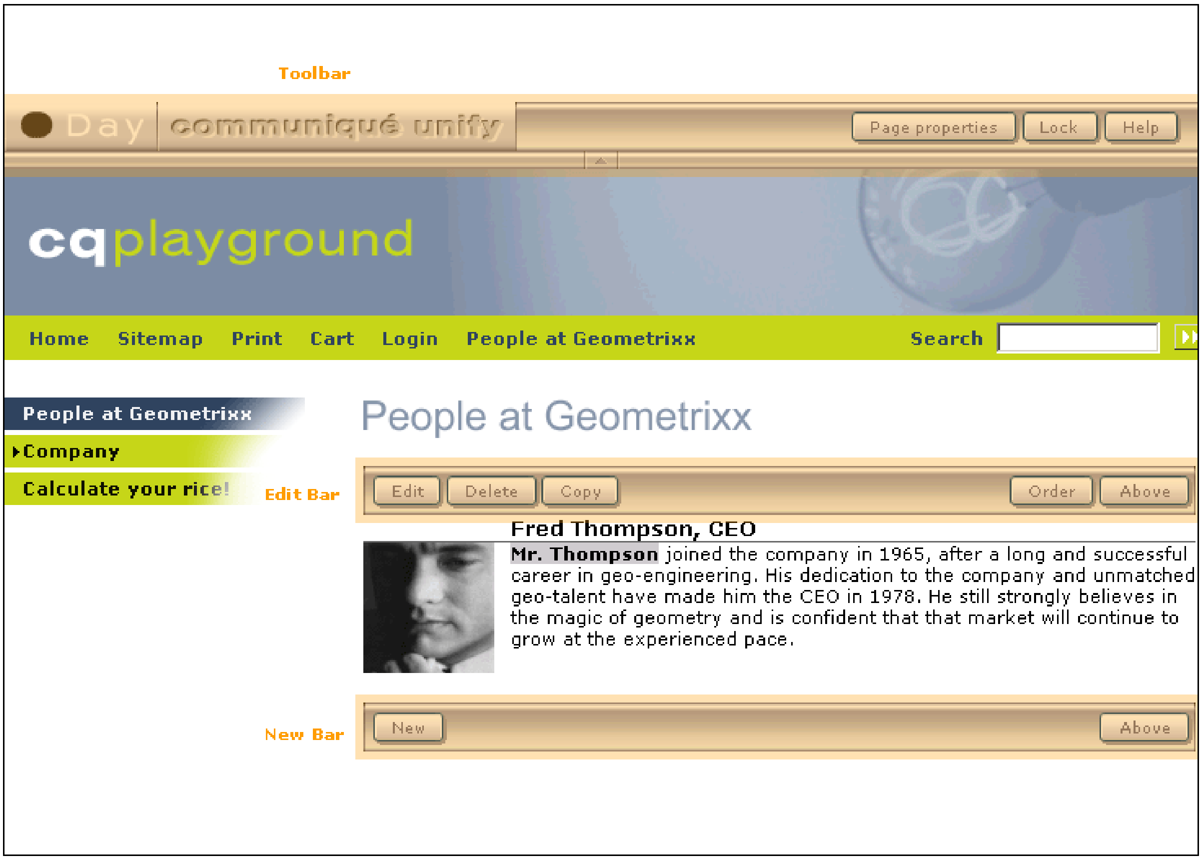
- The template has been deleted after the page has been created. In this case you must either upload the template again or delete the pages with not assigned template.
- The page only acts as a virtual node to structure the website, but has no content itself. For example the top level pages in the Miscellaneous View are used for grouping but have no content and no template assigned.

All pages will contain a series of **embedded controls** to allow the author to edit the content of the page.

Particular editing controls may or may not be visible to the author, depending on that author's access and modification rights.

The controls provide options for the author to create, edit, order, and delete paragraphs or change general settings of the entire page.

The same templates are used to render a content page on an authoring instances as well as on live instances. On live instances all controls are forced to become invisible by setting the **Show** variable to `1` in the configuration.



The three basic user interface elements are:

- Toolbar - Contains options that apply to the entire page. It is always located at top of the page.
- Edit Bar This control provide options for the author to edit, order and delete content in a paragraph. It is usually placed above the associated paragraph.
- New Bar This control provides options for the author to create and order paragraphs. It is usually placed at the end of a paragraph group.

Some templates may have their own specialized toolbars and edit bars. Check the project's user manual for a description of any project specific controls.

Editing Page Content

- Toolbar
  - Page Properties
  - VersionWarp
  - Show Mode Switch
- Edit Bars and New Bars
- Content Editing Controls

- Rich Edit Control
- Color Control
- Date Control
- File Upload Control
- Image Control
- Image Crop Control
- Image Mapping Control
- Media Library Control
- Table Control

1.3.4.1. Toolbar

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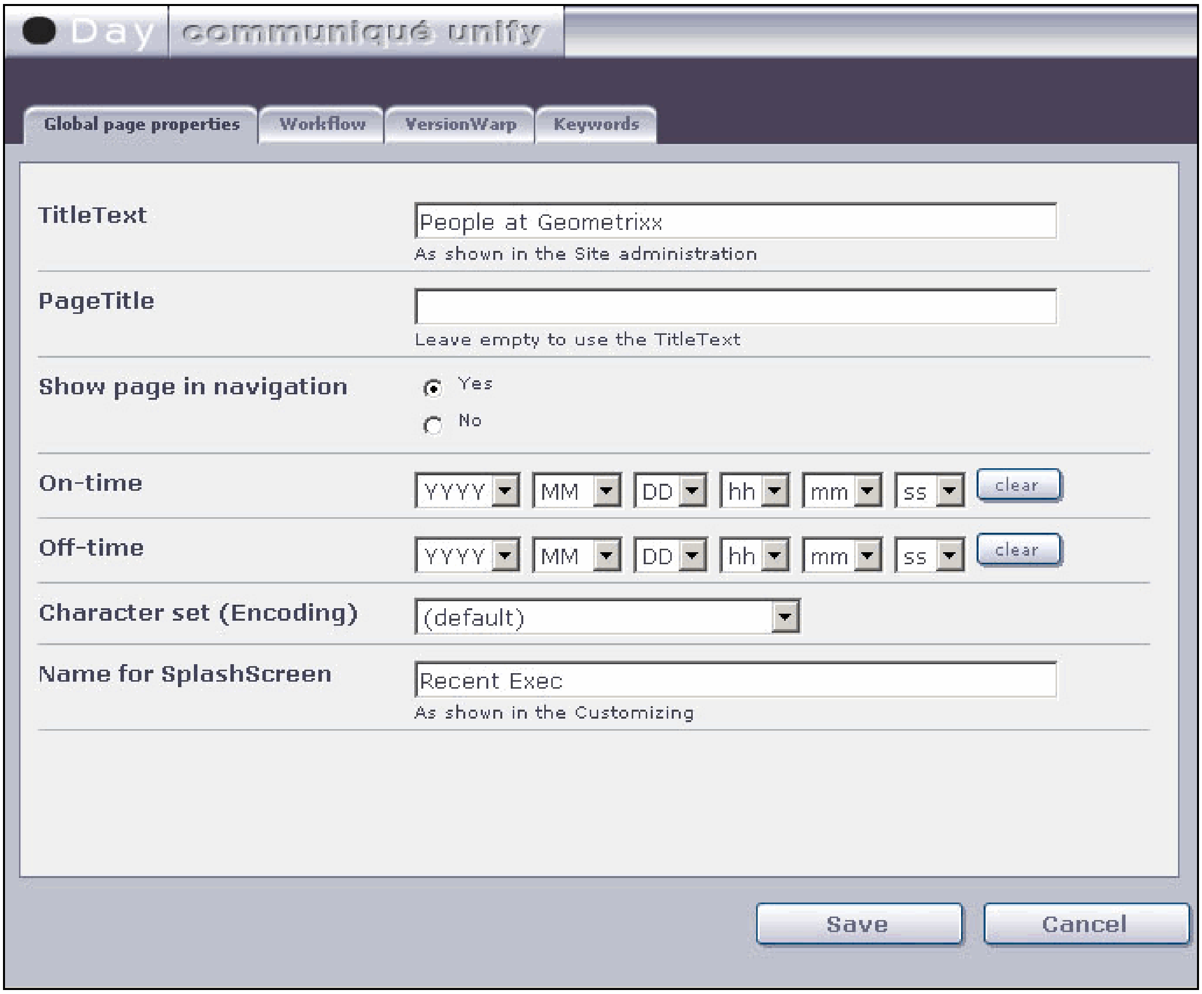
GUI Element	Description
Help	Opens the help page for the actual template in a separate browser window. If the template is project specific, the help page must either be created by the template author beforehand or can be added by an author with the appropriate rights in the **`Help`** section of the Micellaneous section
Lock/Unlock Page	Used to lock the page so that only the locking author is able to edit the content of the page.
Page Properties	Opens a dialog in a separate browser window, where settings applying to the current page can be edited, workflows can be assigned and previous versions of the page can be restored.
Show Mode Switch	Clicking on this arrow will make all edit controls disappear on the page. This is used to check how the page will look when it is not in authoring mode, such as, for example, when it is replicated to a public accessible instance.

1.3.4.1.1. Page Properties

Clicking on the **`Page Properties`** button in the toolbar brings up a dialog:



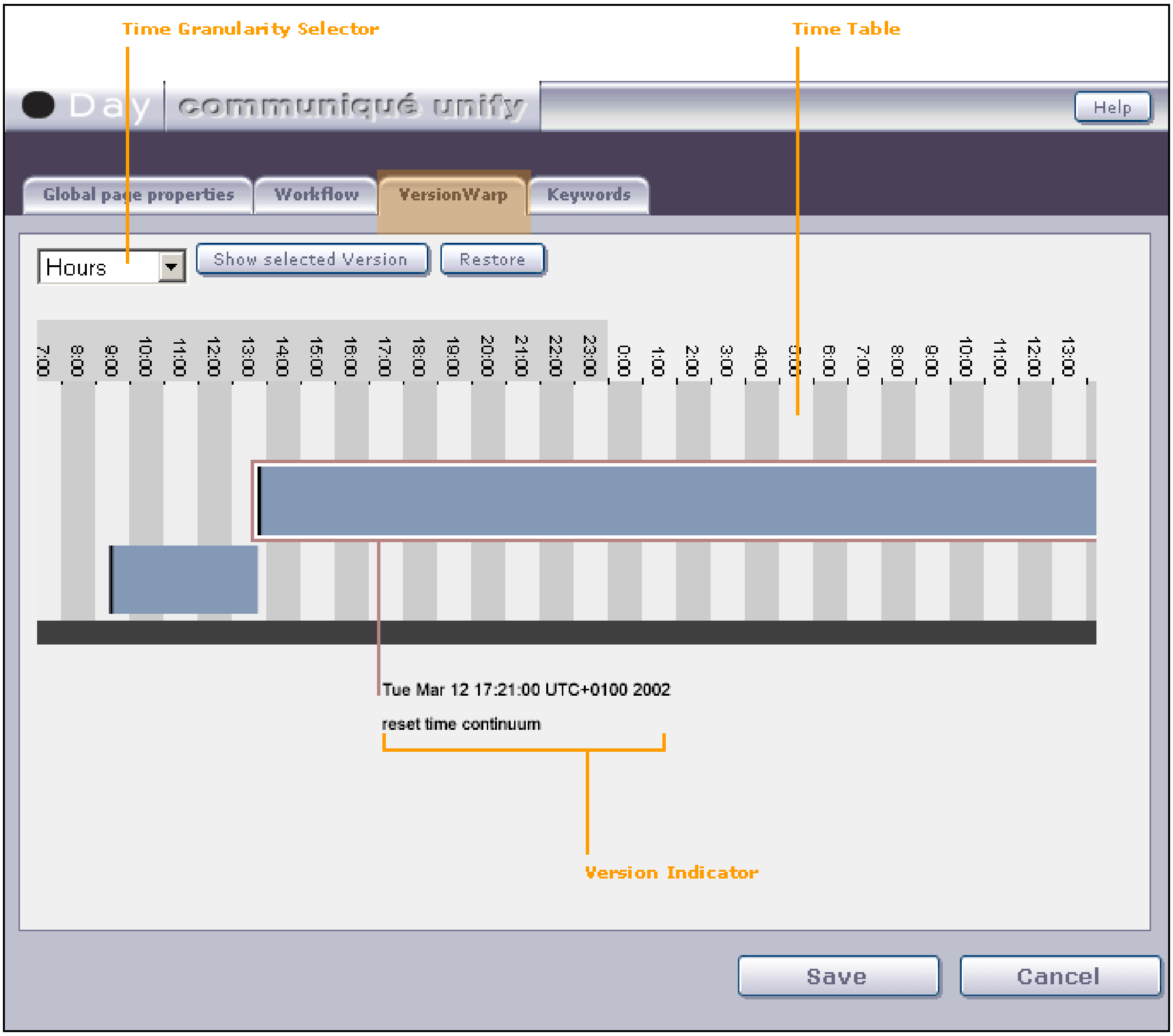
The set of tabs available in the **Page Properties** dialog depends on the template used for the page.The following is a list of the default tabs:

Tab Name	Description
Global Page Properties	The input fields in the **`Page Properties`** tab are based on the template used for the page. However, there is a minimal set of information that must always be editable in this tab: - **`Title Text`**: The title of the page shown in the Site view of the CMS. - **`Page Title`**: The title of the page that will appear on the page itself if used by the template. - **`On-Time`**: The date and time that this page will become accessible. - **`Off-Time`**: The date and time that this page will cease to be available.

	The on-off time settings are used by the Delivery module of Communiqué 3 to determine whether the page should be delivered. The above image example has two additional, project specific inputs, `Show page in Navigation` and `Name for Splash Screen`. Such project specific input fields are described in the project specific user manual.
Workflow	Used to assign a workflow to the current page.
VersionWarp	Contains a visual tool to view and restore previous versions of the actual page. To tool requires the SVG Plugin to work. If not installed an error message will be shown.
Keywords	An optional tab used to assign keywords, defined with the Glossary Template, that can be used inside the template to, for example, allow the page to be found by searches using those keywords.

1.3.4.1.2. VersionWarp

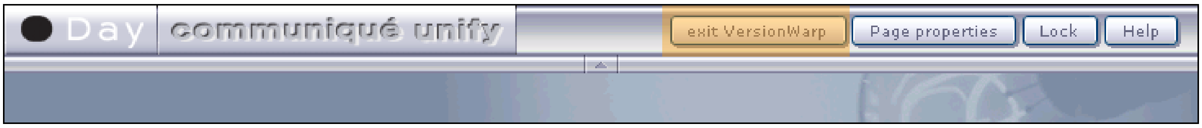
The **VersionWarp** Tool in the Page Properties dialog is a visual tool to **select**, **view** and **restore** previous versions of the current page:



GUI Element	Description
Time Granularity Selector	In this dropdown the granularity of the timetable can be selected. You can change this at any time. It is a useful way to zoom in or out of the timetable.
Show Selected Version	Shows the selected version in a separate browser window.
Restore	Restores the selected version of the page. After reconfirming your choice, the selected page version is restored and a message is shown indicating

	that the restore function was successful. Refresh the content page to see the restored version.
Time Table	The horizontal axis shows time while on the vertical axis the available versions are stacked one on top of the other, the oldest version being at the bottom of the stack. The blue bars represent the life span of the version. To scroll the timetable simply click anywhere on the timetable, hold down the right mouse button, and move the mouse to the left or right.
Version Indicator	It shows the currently selected date and time and highlights the version that is currently active with a red frame.

If you click on the **`Show Selected Version`** button the selected version is shown in a separate browser window. The toolbar will have an additional button labeled **`exit VersionWarp`**:

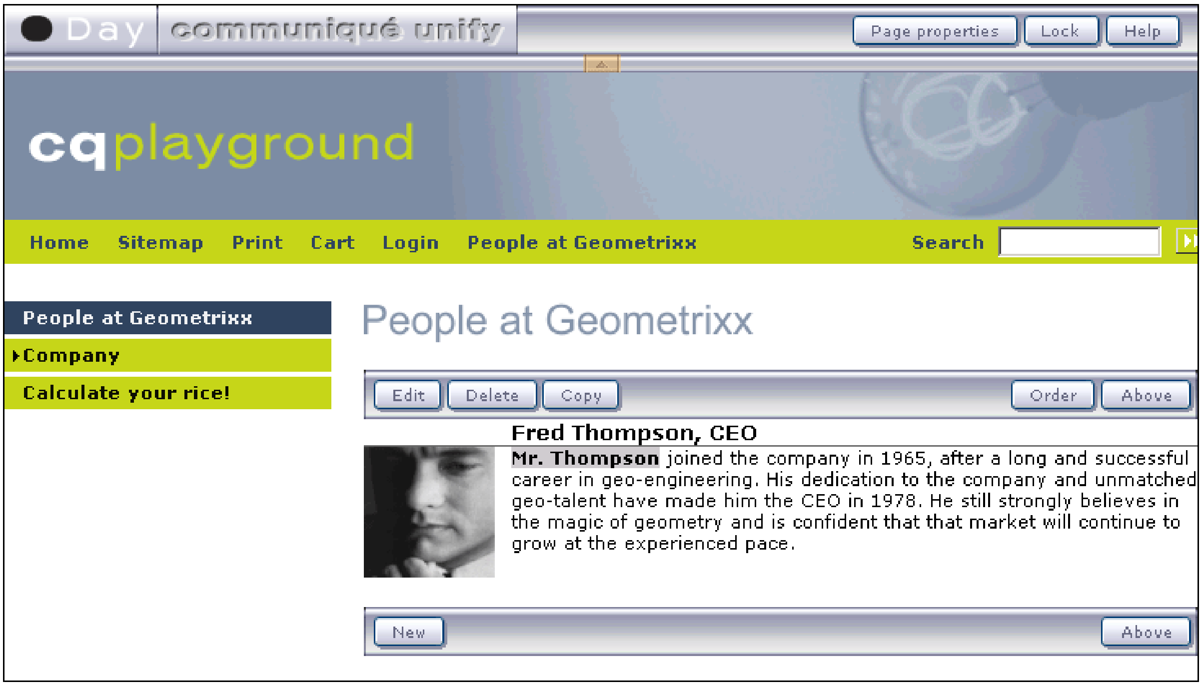


To get back to the current version simply click on this button. This will reload the page with the current version.

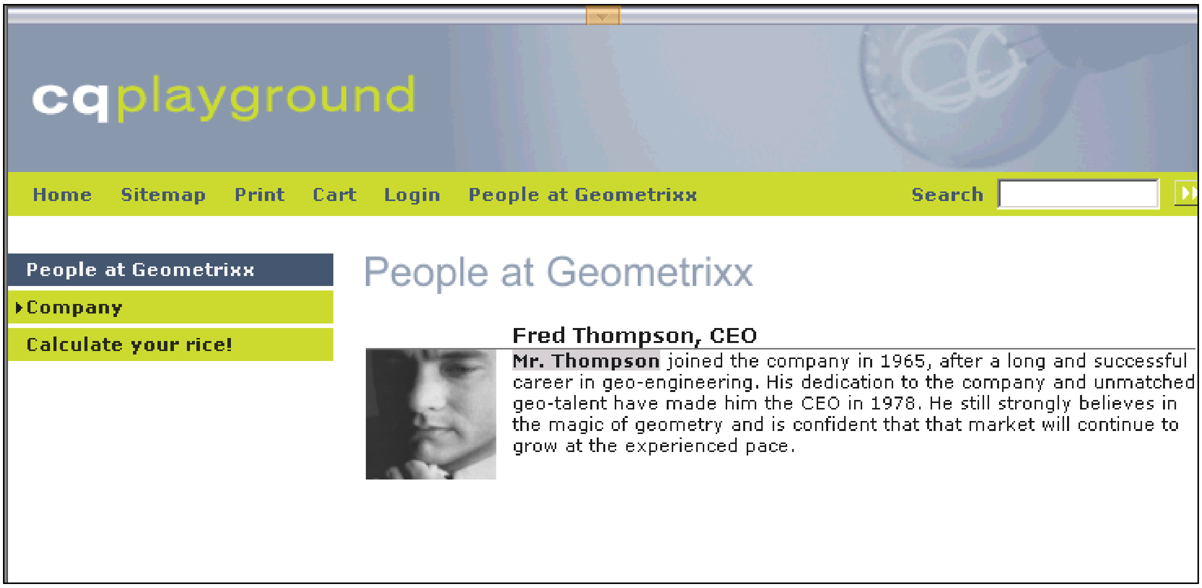
1.3.4.1.3. Show Mode Switch

You may sometimes wish to view the contents of a webpage without the embedded editing contols, for example, when you wish to preview what the page will look like to a public surfer of your site.

To get a preview without the controls (which we call the **Show Mode**) you can click on the arrow in the bottom center of the toolbar on the page:



This will reload the page, hiding all the controls on the page and only showing a minimized version of the toolbar with the arrow to switch back to the to the **Edit Mode**:



You can enforce the hiding of the controls and the toolbar by setting the **Show** variable in the configuration to 1. This is usually done for publicly accessible instances where you do not want users to edit the content.

1.3.4.2. Edit Bars and New Bars

A content page is usually divided into paragraphs, each of which can be edited individually. Each of these paragraphs has its own **Edit Bar**, which provides functions that can be carried out on that particular paragraph:

GUI Element	Description
Edit	Opens an edit dialog in a separate browser to edit the content elements of the paragraph. The dialog layout and editable elements depend on the template. See the project specific user manual for details.
Delete	Deletes the paragraph.
Copy	This button is only visible if the paragraph belongs to a paragraph group. It creates a copy of the paragraph and places it at the end of the paragraph group.

Order	This button is only visible if the paragraph belongs to a paragraph group. It is used in conjunction with the **Above** button of the other paragraphs in the group. To move a paragraph, first click on the **`Order`** button of the paragraph to be moved; then click on the **Above** button of the paragraph above which the paragraph to be moved should be placed. The paragraph to be moved will then be placed above the paragraph chosen with the **Above** button. If the paragraph to be moved is to be placed at the bottom of a paragraph group, the **Above** button of the **`New Bar`** must be used.
Above	See description of **`Order`**.

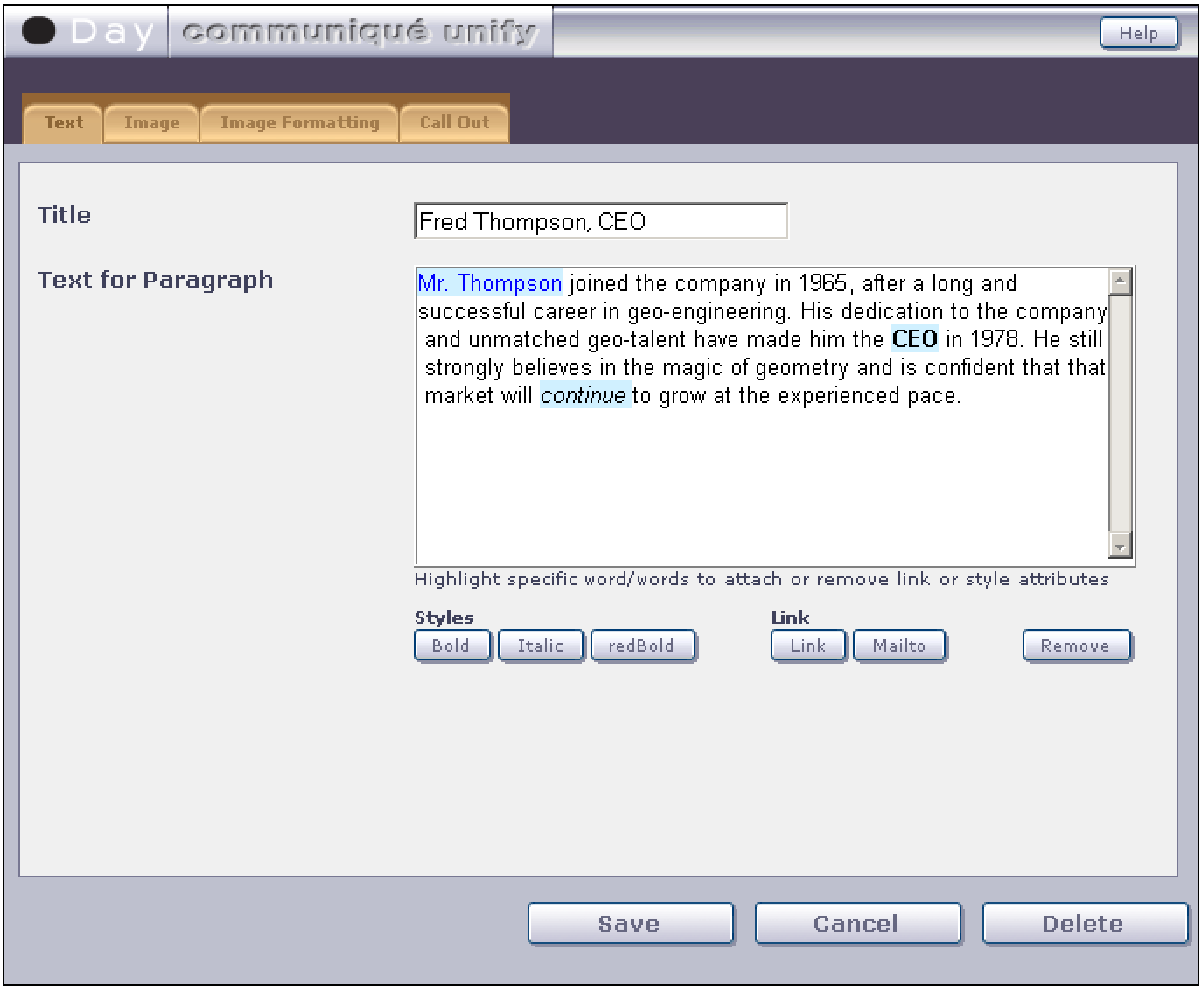
If the template contains paragraph groups, you usually also have an **New Bar** at the end of each paragraph group that allows you to add new paragraphs to the group:

GUI Element	Description
New	Opens a dialog in a separate browser window where you can select the type of the new paragraph to be added. The list of available paragraphs is project dependent. Check the project specific user manual for details.
Above	To move a paragraph to the end of the paragraph group, first click on the **`Order`** button of the paragraph to be moved; then click on the **Above** button of the **New Bar**. The paragraph to be moved will then be placed at the end of the paragraph group.

1.3.4.3. Content Editing Controls

The content of a page is usually grouped into paragraphs. A paragraph itself groups a number of content elements that logically belong together. For example, an image and its description, a table and its title etc.

To edit the content elements of such a paragraph you use the **Edit** button of the Edit Bar that belongs to the paragraph you want to edit. This opens a paragraph editing dialog. The following is an example:



Paragraph editing dialogs are divided into different tabs to organize the editable values into logical groups. To edit the values, numerous types of **edit controls** are available.

In addition to the standard HTML form inputs, the CMS also has a set of more advanced edit controls e.g. Image Mapper, Rich Edit, Table Edit etc.

What controls are available and which values are editable for a specific paragraph is project specific.

Check the projects user manual for details.

The usage of the most common CMS specific controls is explained in the following section.

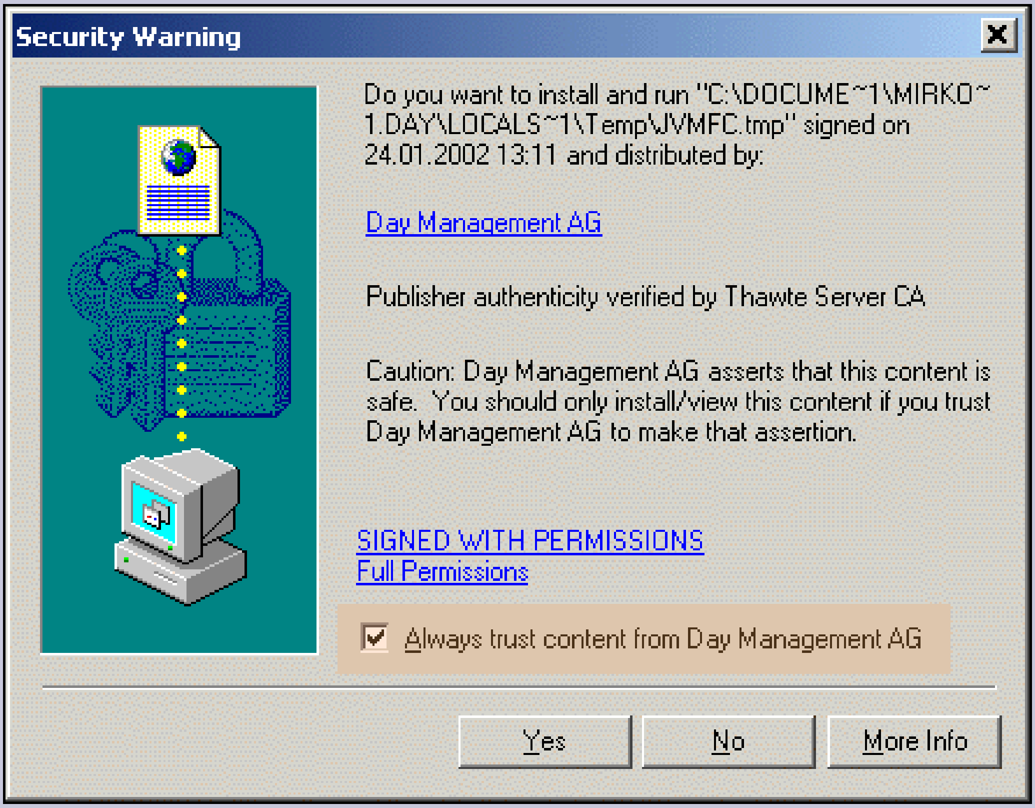
Content Editing Controls

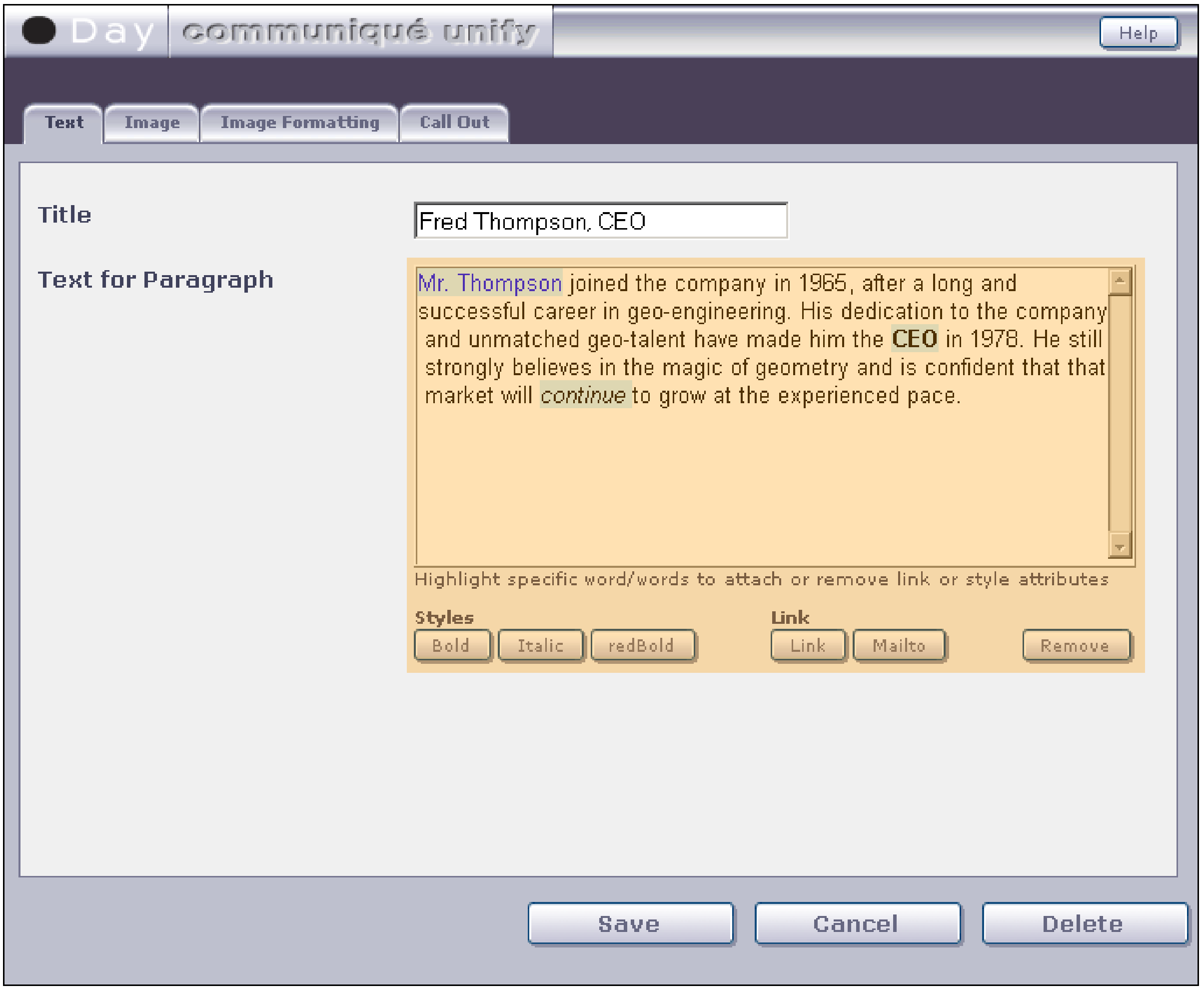
- Rich Edit Control
- Color Control
- Date Control
- File Upload Control
- Image Control
- Image Crop Control
- Image Mapping Control
- Media Library Control
- Table Control

1.3.4.3.1. Rich Edit Control

This advanced **text input control** allows an author to edit and format text using predefined and custom (project dependent) styles.

The first time a dialog window featuring a RichEdit applet is opened, the browser prompts you to trust the applet's certificate. if you activate the checkbox to always trust certificates from Day you will not be prompted anymore :



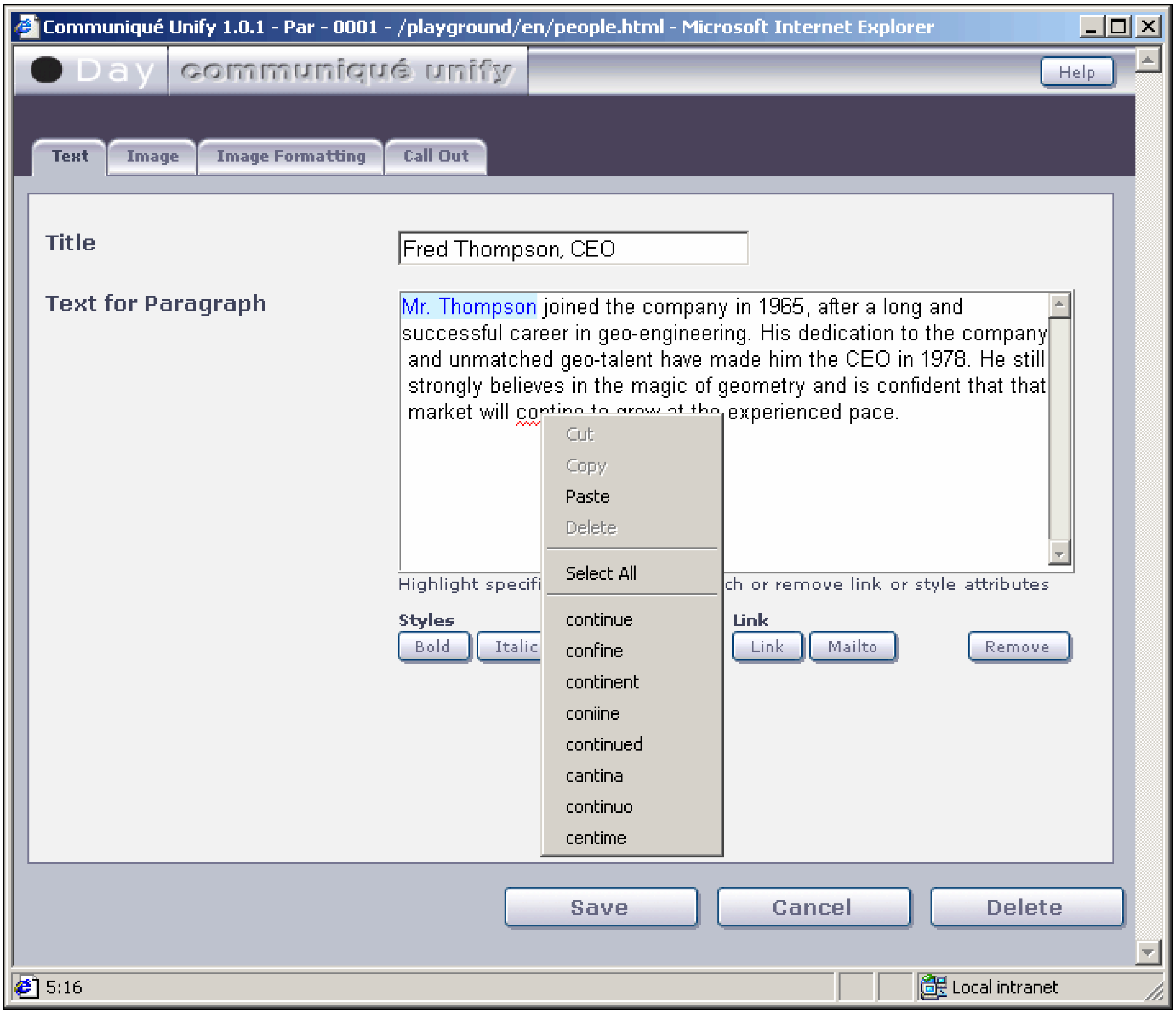


To cut, copy or delete text, highlight the text and then right click the selection to get a drop down menu to cut, copy or delete the selection . Alternatively you can use the standard shortcuts :

- **`Ctrl+c`** for Copy
- **`Ctrl+x`** for Cut
- **`Del`** to delete the selection.

To paste a copy from the clipboard into the text simply place the text cursor at the desired location, right click in the text area and select **`Paste`**. Alternatively you can use the standard shortcut **`Ctrl+v`** to paste the text.

If the Communiqué Services Server is running the text will be automatically **spellchecked**. Misspelled words are underlined with a red wavy line. By clicking on the misspelled word with the right mouse button you get a list of possible corrections:



Highlighting text and then clicking on one of the formatting buttons below the text area formats the text. The RichEdit control is not capable of true WYSIWYG, so different font styles and font colors are used to mark formatted text.

The following is a list of predefined styles:

Style Name	HTML Formatting	Representation in RichEdit	Description
Link	<A HREF=#>*text*</A>	fgColor = 0000ff bgColor= d0f0ff underlined	Opens a content tree browser to select and internal link and an input field for defining an external link.
Mailto	<A HREF=mailto:#>*text*</A>	fgColor = 0000ff bgColor= d0f0ff	Opens a separate window with an input

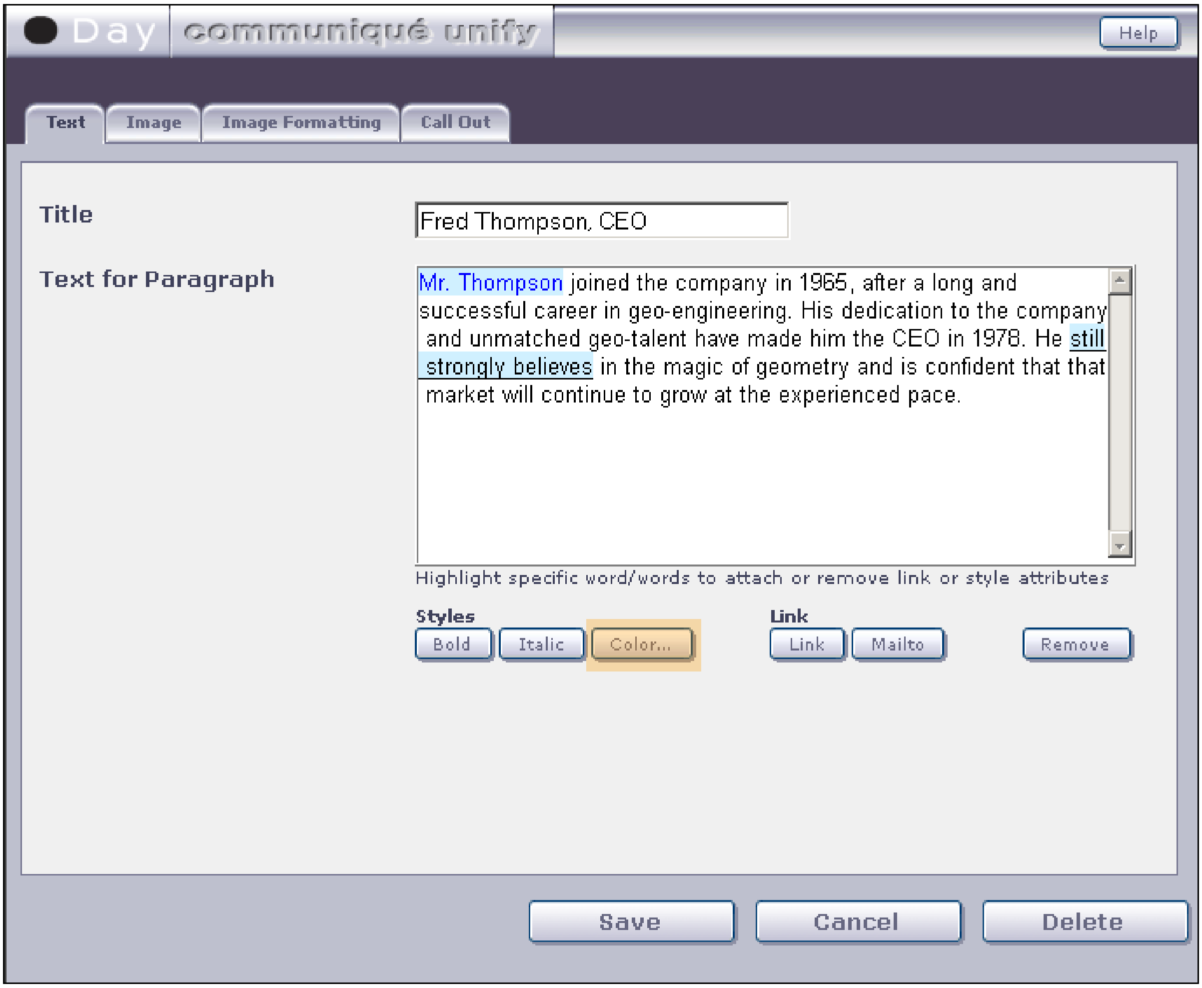
		underlined	field for defining an e-mail address.
Bold	<B>*text*<B>	fgColor = 000000 bgColor = d0f0ff bold	Renders the marked text with bold style.
Italic	<I>*text*</I>	fgColor = 000000 bgColor = d0f0ff Italic	Renders the marked text with italic style.
Color	<FONT color=#>*text*</FONT>	FgColor = selected Color BgColor = d0f0ff Underlined	Opens a separate Window to select a font color for the marked text.

To remove a style, highlight the styled text and click on the **`Remove`** button.

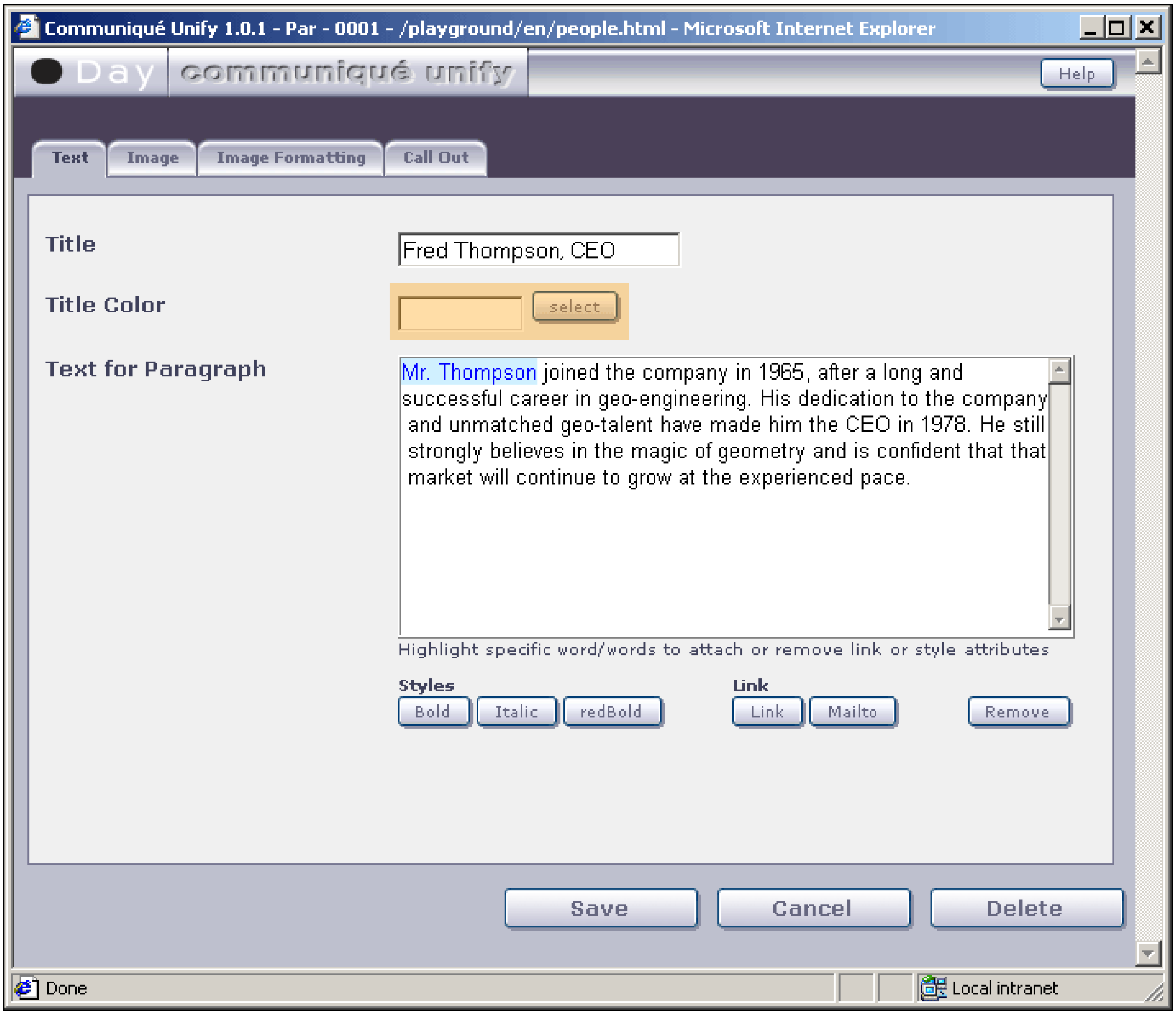
For the project specific styles that may have been added consult the project specific user manual. In the above example screen `redBold` is a project specific custom style.

1.3.4.3.2. Color Control

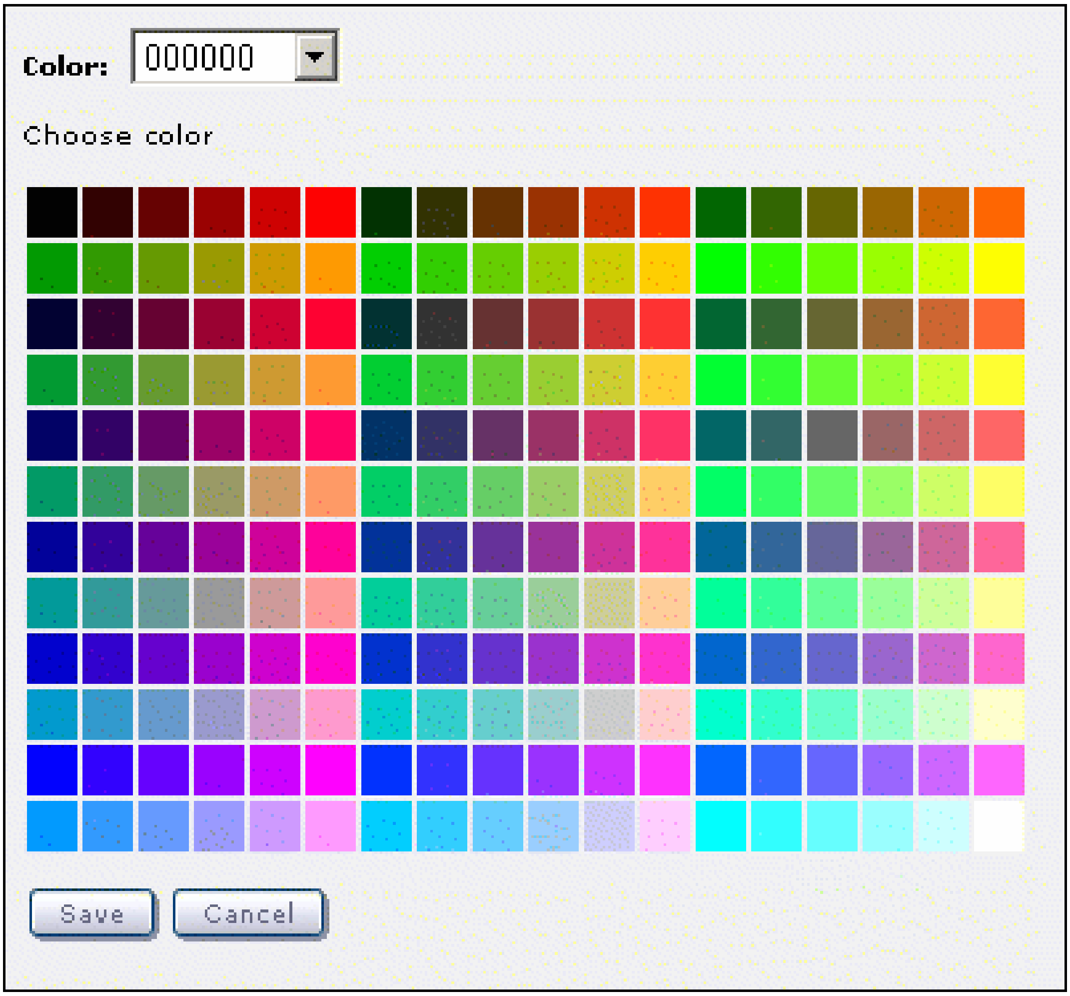
This control allows the author to select a color. It can be configured to work in a number of different ways. For example, there is a predefined style in the Rich Edit control to colorize the text:



But it can also be used as a separate color control:

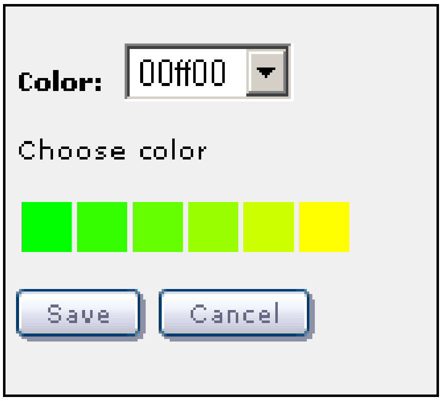


Either way the color control will open a new dialog where the color can be selected. The color picker can be configured to work in different ways. The general color picker:

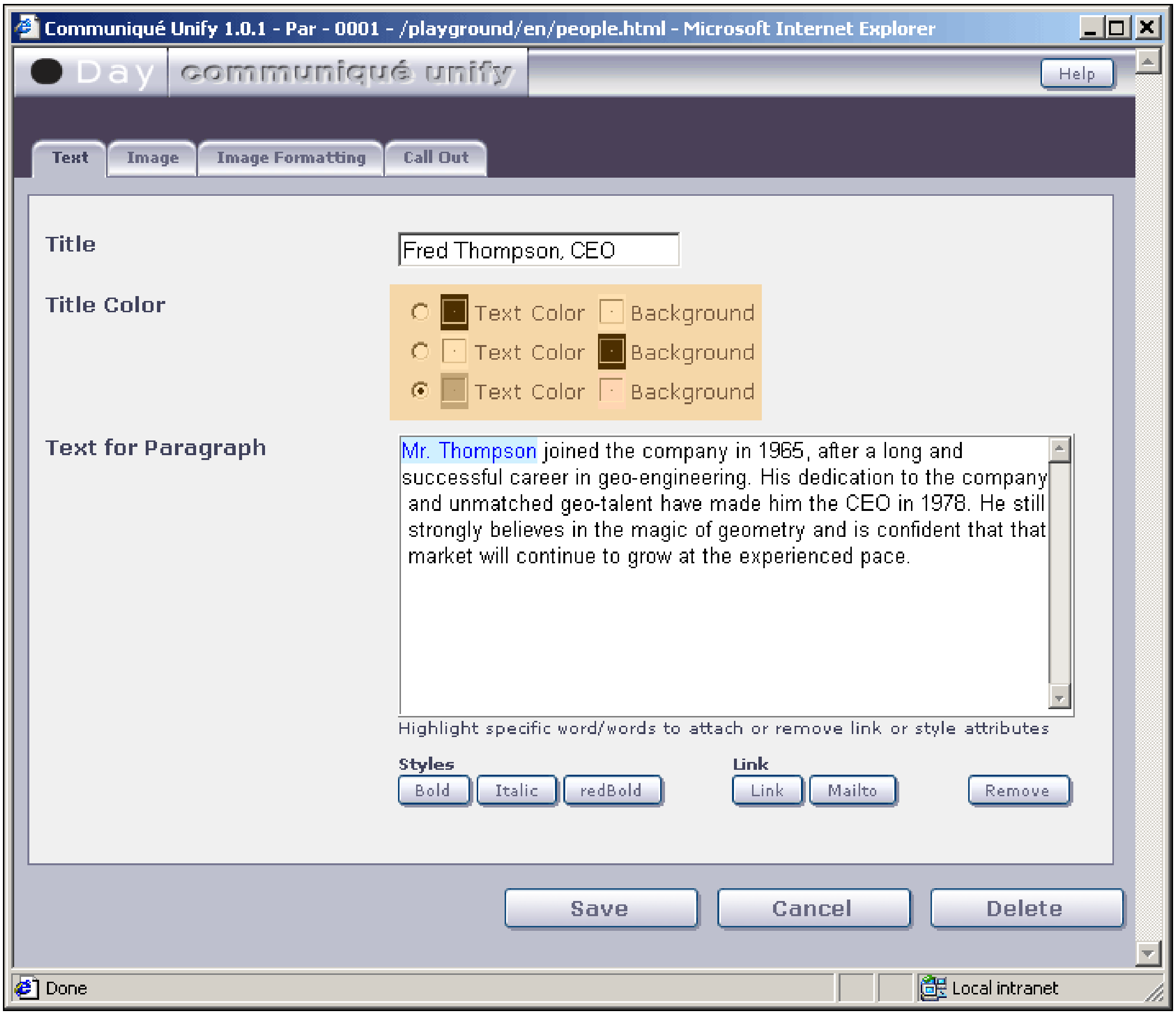


GUI Element	Description
Color Drop Down	Lists all available color to pick from. This type of selection is useful if you know the hexadecimal value of the color.
Color Chooser	Click on the color sample to select the color if you dont now the hexadecimal number. The color value will automatically be shown in the Color drop down.
Save	Closes the dialog and returns the selected color to the previous dialog.
Cancel	Aborts the color selection process and closes the dialog.

The number of colors can be restricted, for example:



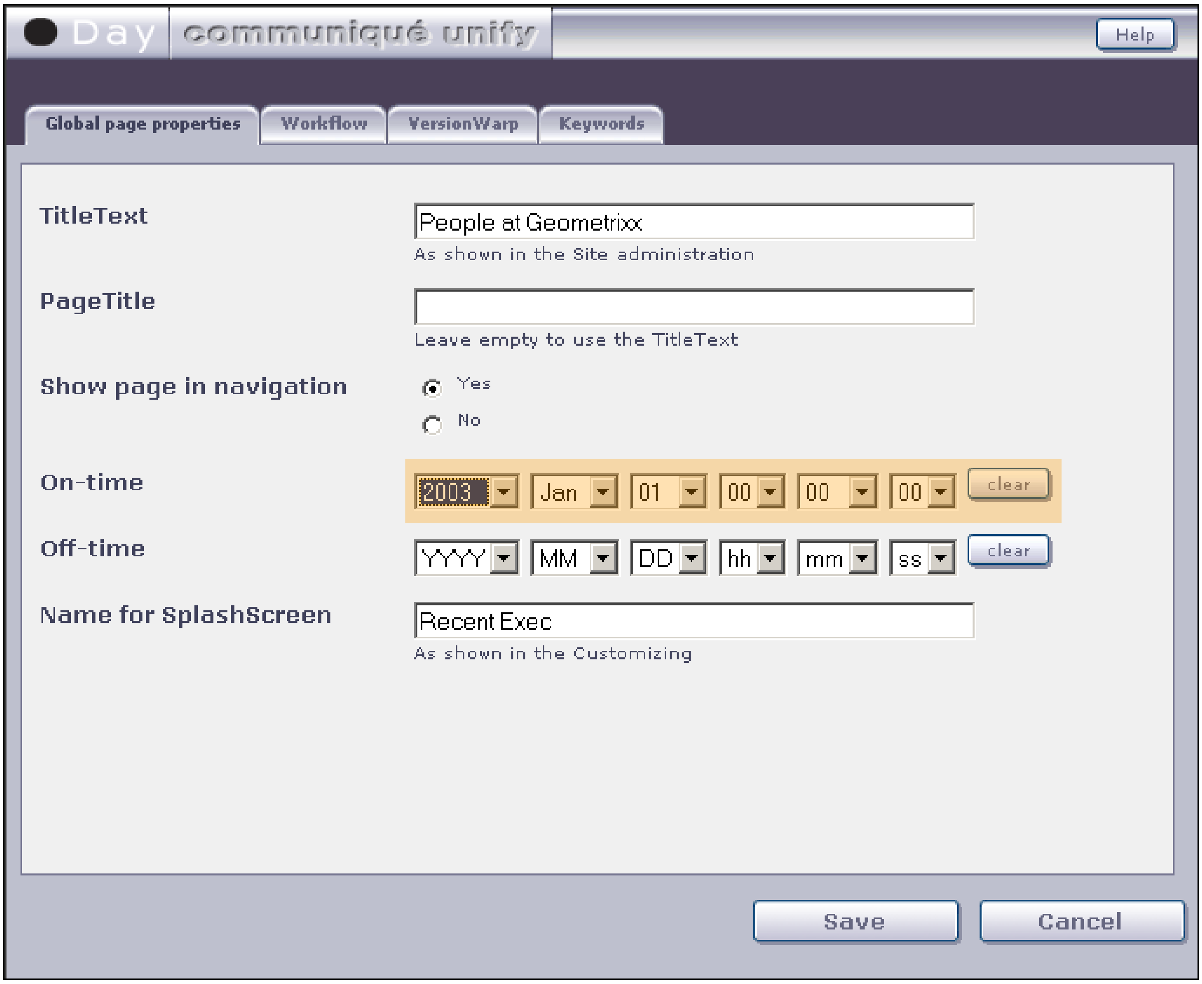
Or it may be configured to work as a color scheme selector:



To choose a color scheme simply select the radio button of the desired pattern.

1.3.4.3.3. Date Control

This control lets you select a date and/or time:

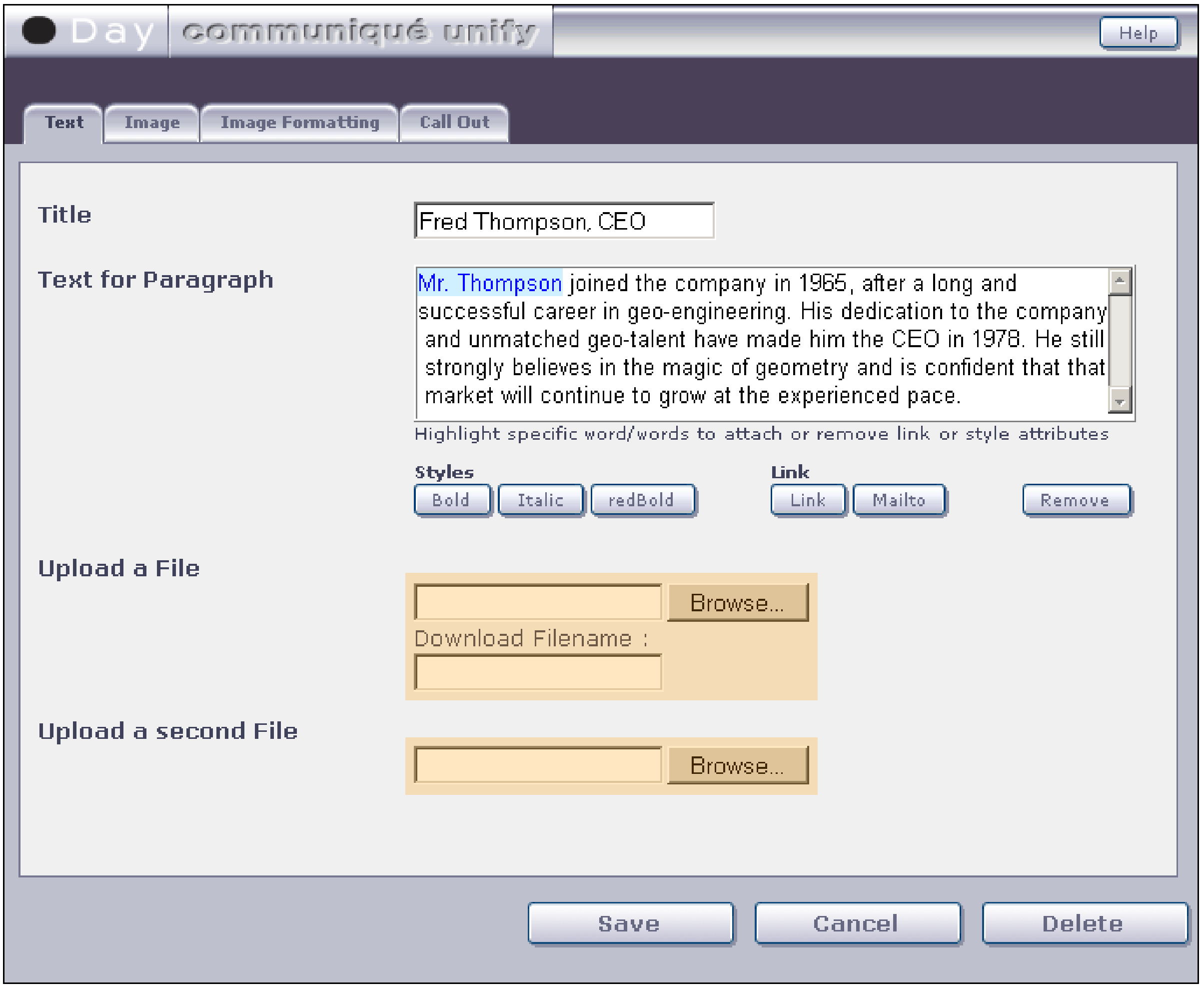


The template defines which parts of the date are editable and the granularity of the selectable values.

1.3.4.3.4. File Upload Control

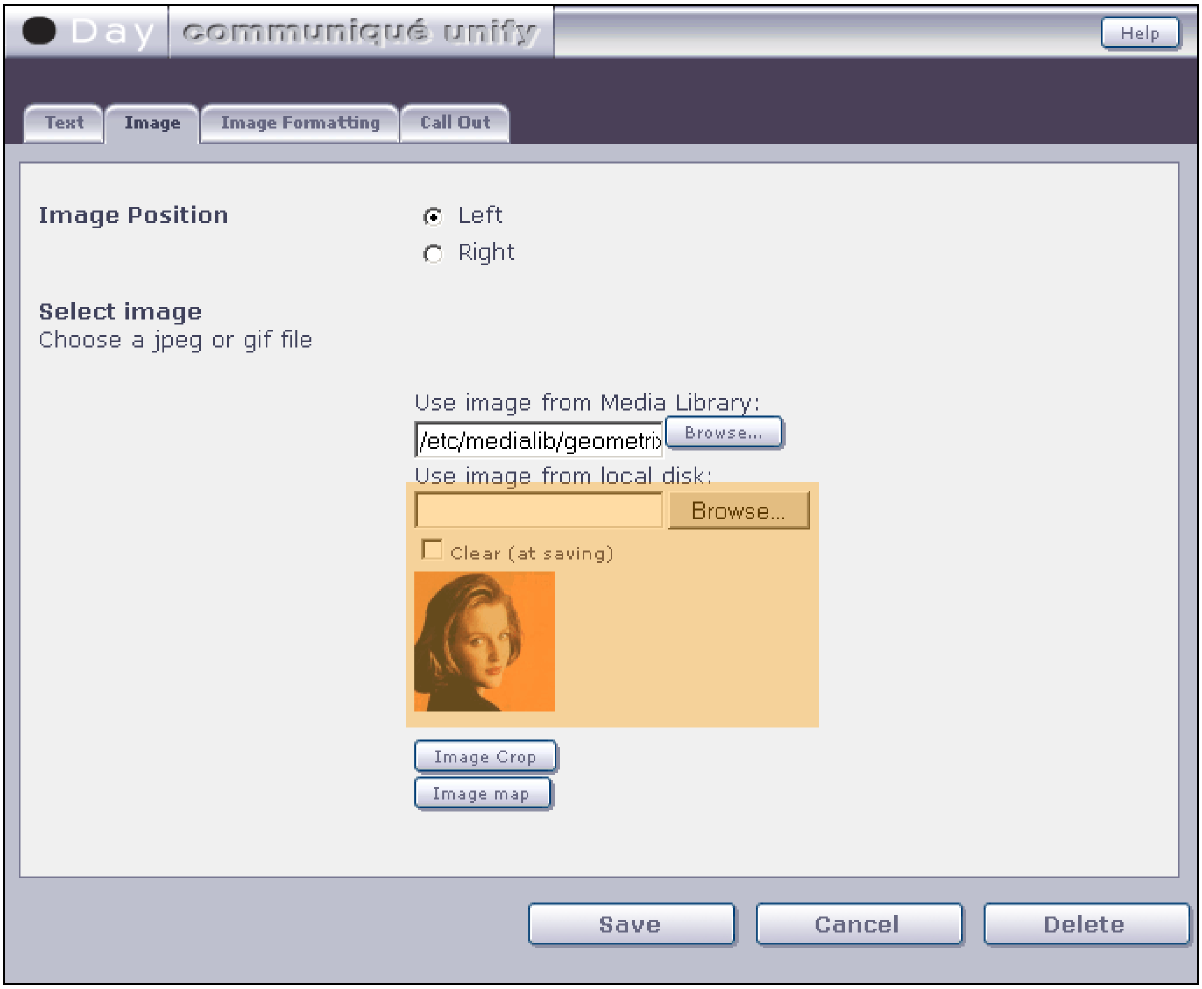
This control is used to upload any kind of file, e.g. Microsoft Word or PDF files, to store it in a content element of the page so it can, for example, later be downloaded from the page.

Optionally it offers the ability to define the download name to be text other than the file name. If this field is left blank the filename will be used.



1.3.4.3.5. Image Control

This control is used to store an image in the content page, such as a JPEG or GIF file, to be used in the corresponding paragraph:

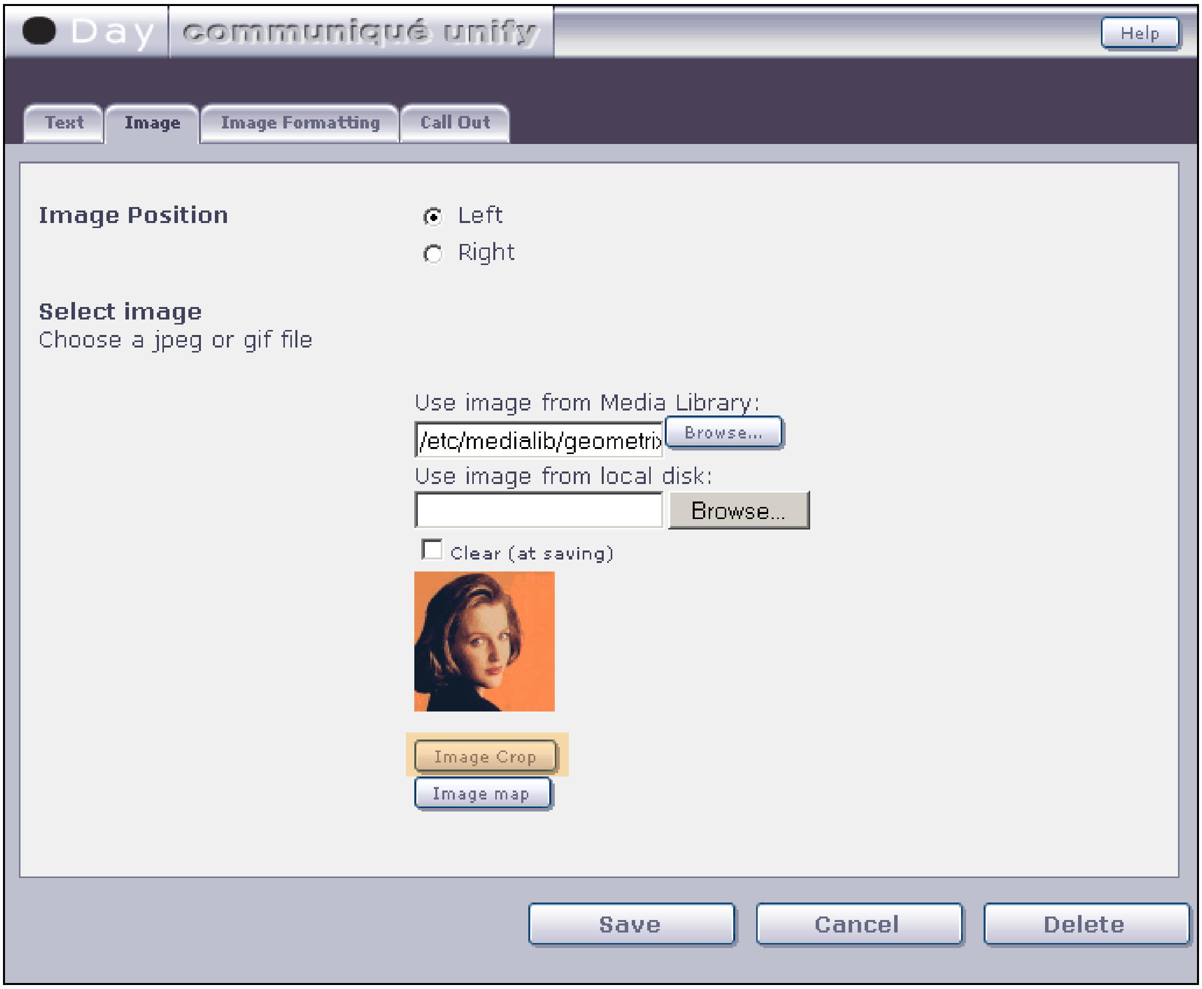


Click the **Browse** button to select the image file to be inserted into the paragraph. A standard file browser dialog opens which allows the selection of a image from the local file system. Next time you open the dialog the uploaded image is shown below the control.

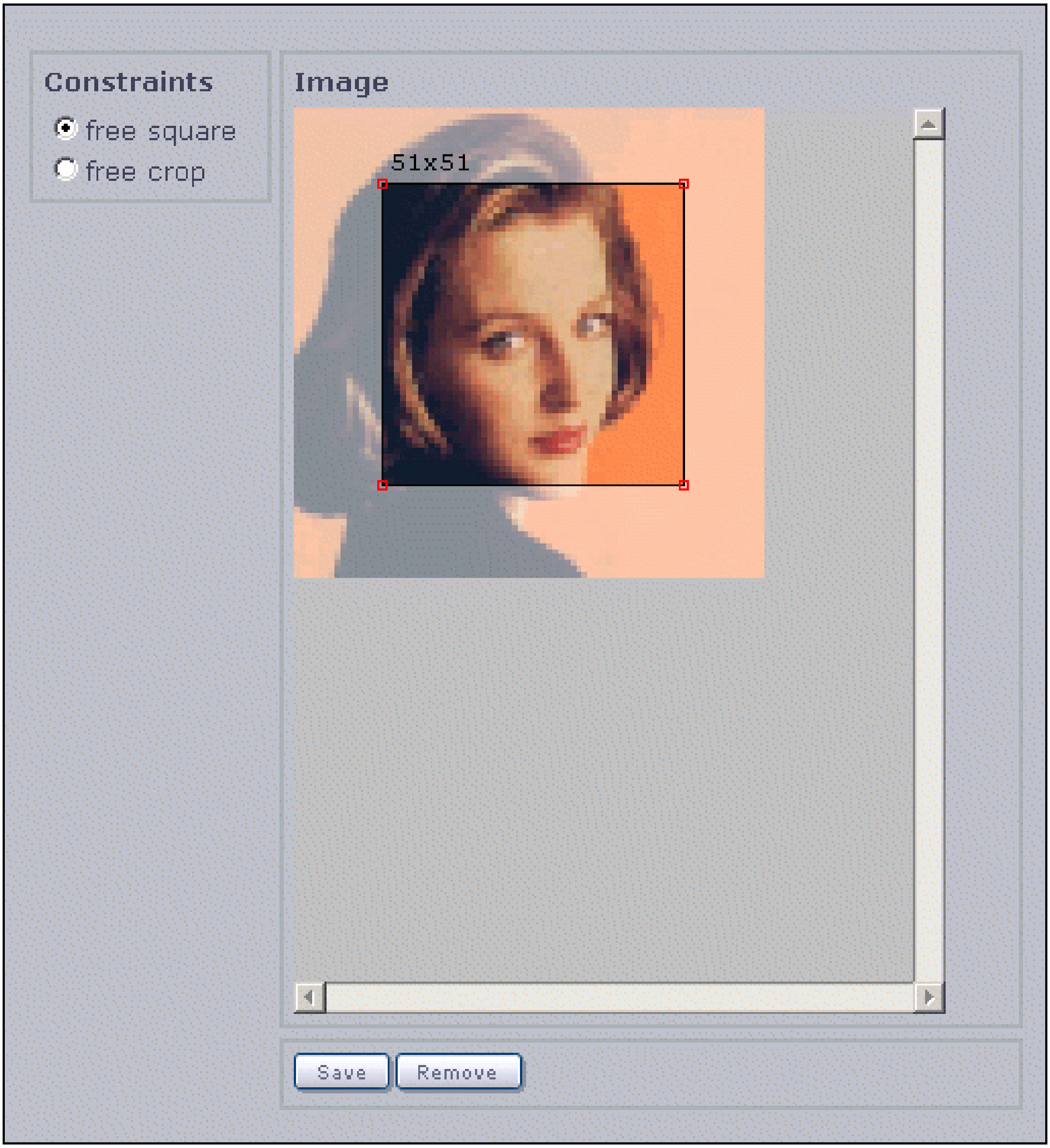
To remove the image check the **Clear** box and click on the **Save** button.

1.3.4.3.6. Image Crop Control

An image control can be extended with **image cropping functionality**. The button is added below the image control:



This control opens a separate dialog to define the cropping area for the image:



To change the cropping area of the image, click inside the cropping area and drag with the mouse to the desired location. To change the dimensions of the cropping area, click on a handle and drag with the mouse to the desired dimension.

The following keyboard functions are available:

- The **+** key zooms in.
- The **-** key zooms out.
- The **Space** bar changes between three different views: normal, light background image with

dark crop area, and dark background image with light crop area.

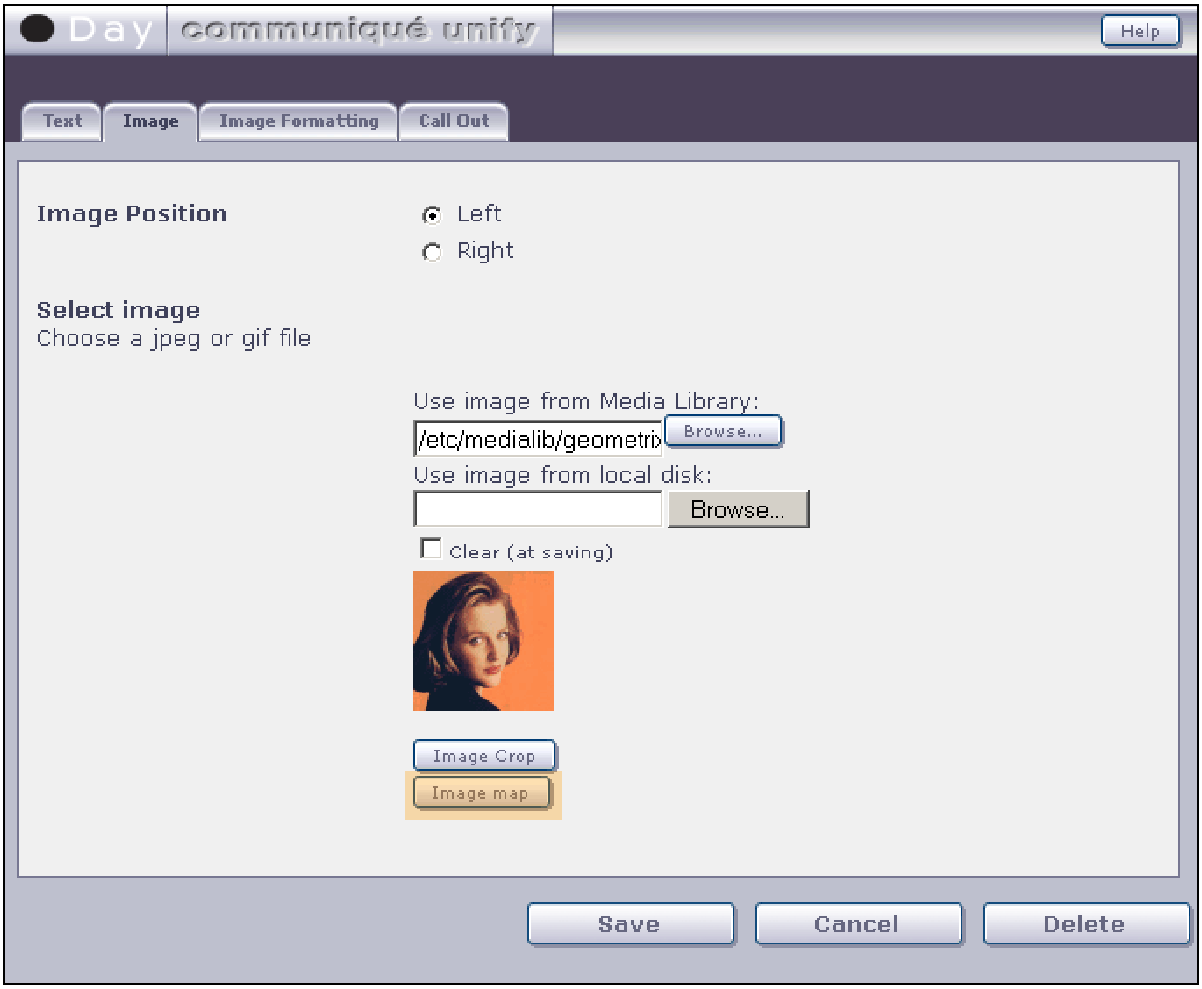
Click the **`Save`** button to save the current selection. Note that the values are not saved in the paragraph until **`Save`** is clicked on the main edit dialog.

The left portion of the cropping tool may display constraints, which can limit the cropping rectangle. For example, there may be a constraint called `Square Crop`, which limits the cropping area to dimensions that are symmetrical. The available constraints are project dependent.

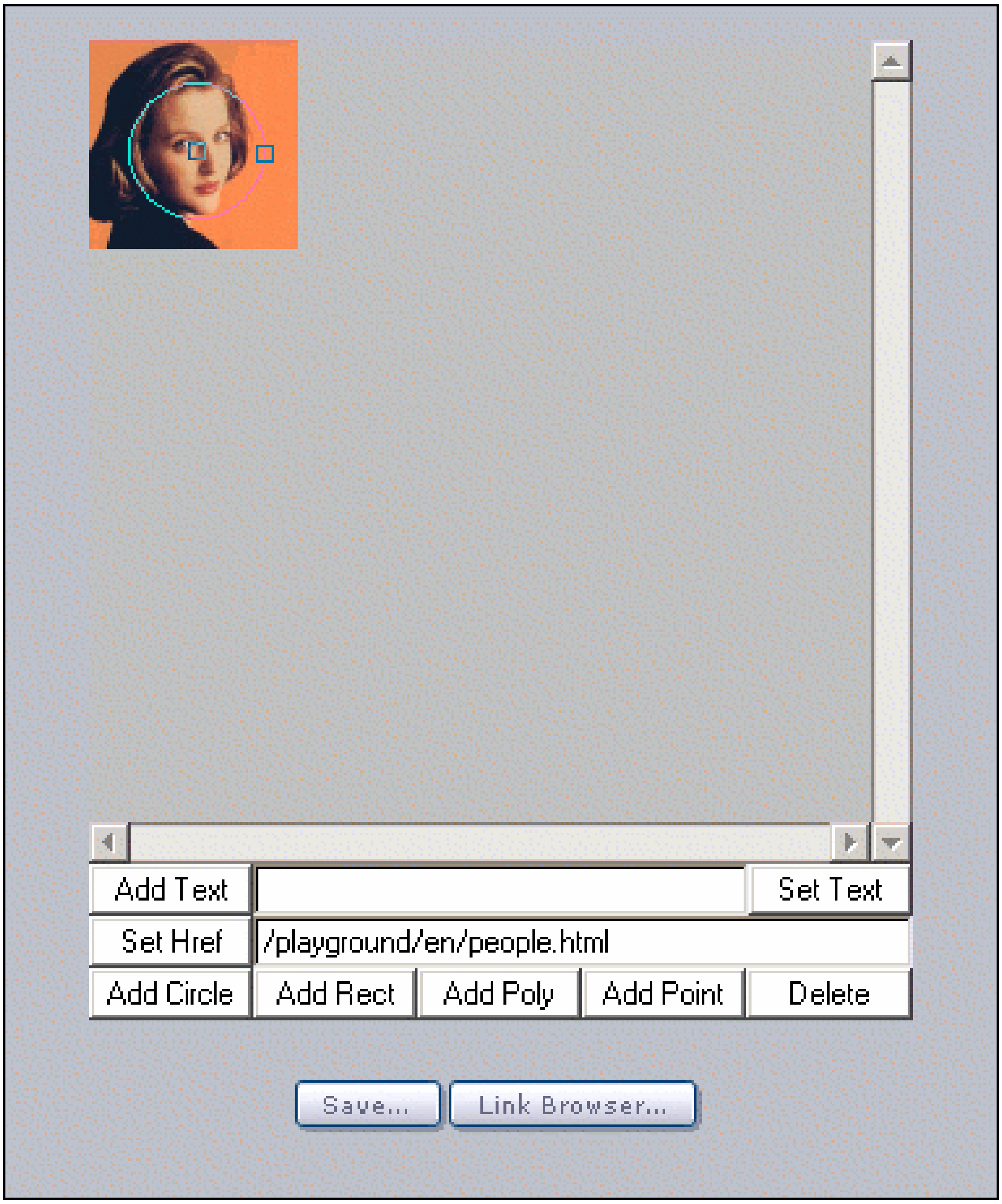
Click the **`Remove`** button to remove the cropping rectangle coordinates and close the dialog.

1.3.4.3.7. Image Mapping Control

An image control can be extended with **image mapping functionality**. This means you can define clickable areas on the image and assign links to them. The button is added below the image control that uploads the image to be mapped:



Clicking on the button will open to following dialog:



This control defines the areas and texts of the image map via a graphical user interface.

GUI Element	Description
Add Circle	Click the button and than click in the image area. A circle is created with a handle in the middle to move the circle's position and a handle on the perimeter to change the radius of the circle. This circle represents one clickable area.
Add Rect	Click the button and than click in the image area. A rectangle is created with a handle in the middle to move the rectangle around and two handles in the top left and bottom right to change the size of the rectangle. This

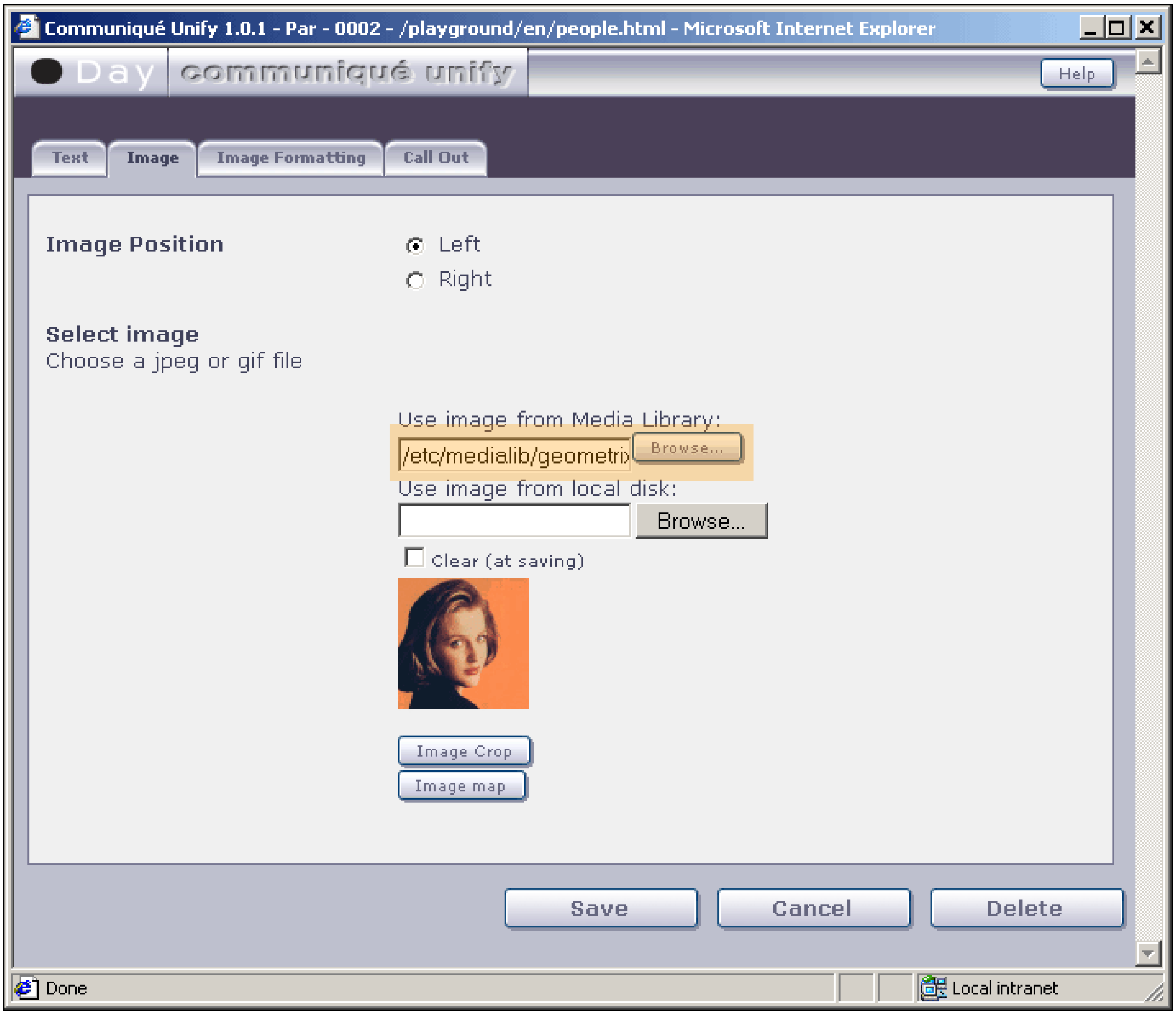
	rectangle represents one clickable area.
Add Poly	Click the button and than click in the image area. This starts the creation of a polygonal area. Subsequent clicks on the image generate more polygon points. To finish the polygon click the button labeled **`End Poly`**. To reshape the polygon, select it and click and drag the points to the desired location, or move the entire polygon by clicking and dragging the handle in the center.
Add Point	To add an additional point to the polygon, select it and choose an endpoint handle of the polygon by clicking on it. Click the **`Add Point`** button to add the additional polygon point between the selected point and the next counterclockwise polygon point.
Delete	Select any area or text element and then use this button to delete it.
Set Href	Select the area or text element to associate with the link. Enter the URL or handle in the input field next to the **`Set Href`** button; this will turn the button red. Click this button to assign the URL to the area element.
Add Text	To add text to be inserted to the image, enter the desired string in the input field to the right of the `Add Text` button. Then click the button and than click in the image area. The text is rendered in the image with a handle in the top left to drag the text to a different location. This button can be used repeatedly to add multiple instances of the same text. Note that this text can be set as a link within the image. See **`Set Href`** for more detail.
Set Text	To set text to be used for the Tool Tip for the image map, select an area and then enter the desired string in the input field to the left of the `Set Text` button. The button turns red when text is being entered. Press this button to update the text in the image.
Link Browser	To set or change an internal link using a tree control, first select an image map area and then click the **`Link Browser...`** button. Select the page in the tree and press ok. The link is then set for the area element. It is not necessary to click `Set Href` to confirm.
Save	Clicking the **`Save...`** button closes the image napper dialog. It is important to note that the changes made are not yet stored. To store the values in the content page, click on the **`Save`** button of the paragraph edit window.

	If the image mapper is reopened without saving in the main edit dialog, all the changes are reset to their previous values.

The clickable areas are rendered as HTML **<MAP>** and **<AREA>** tags in the output. The text placed inside the images is dynamically merged into the final image output.

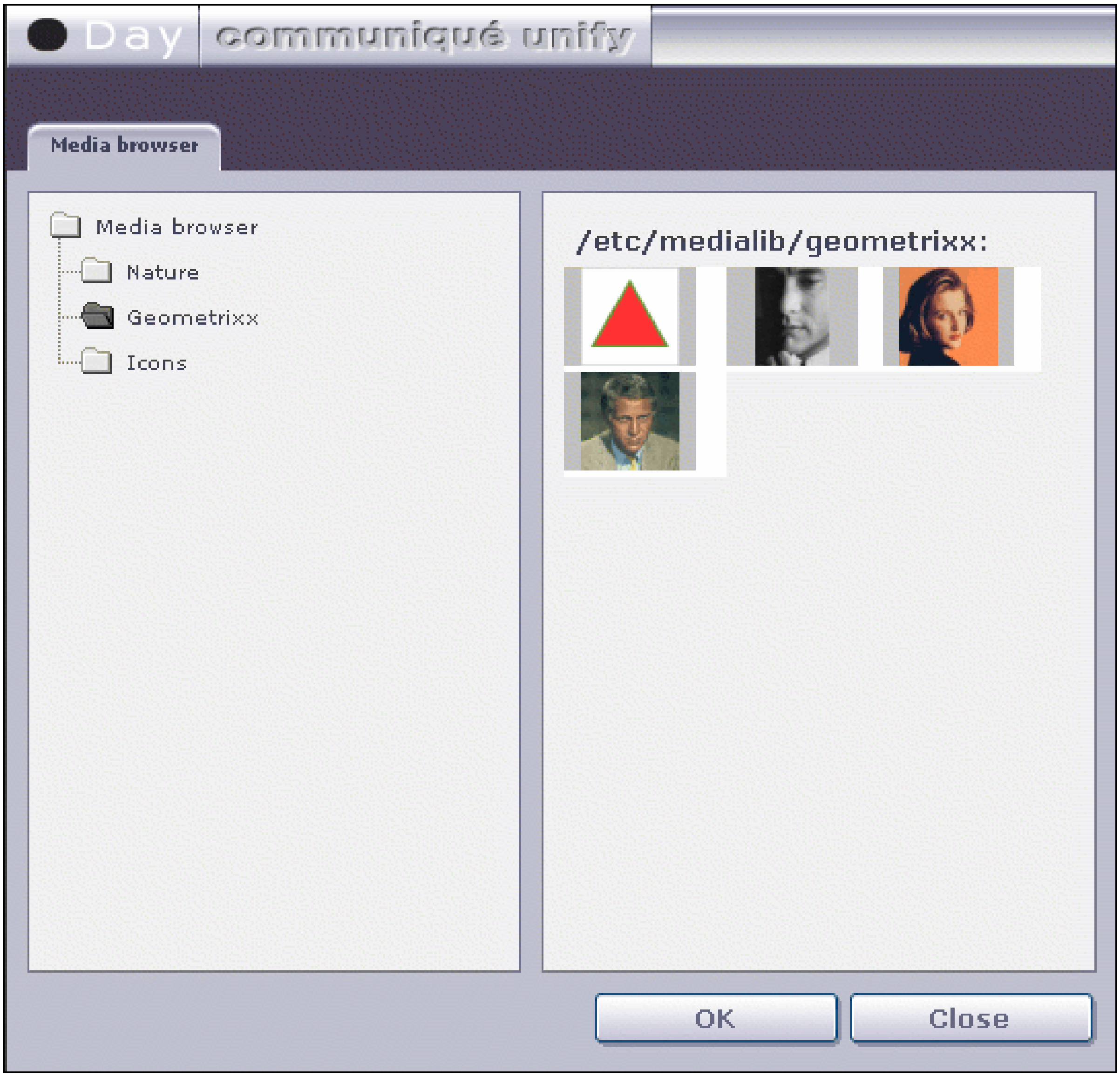
1.3.4.3.8. Media Library Control

The **Media Library** control is a combination of the **Image Upload** control and the **File Upload** control, meaning that you can use it to upload an image or file to be stored as content in the page.



The difference between this control and either the **Image Upload** or the **File Upload** control is that in this case the data is not uploaded from the local file system but from a collection of media files defined in the media library pages in the `Miscellaneous` section of the Site view.

Clicking on the **`Browse`** button brings up a special media library browser:

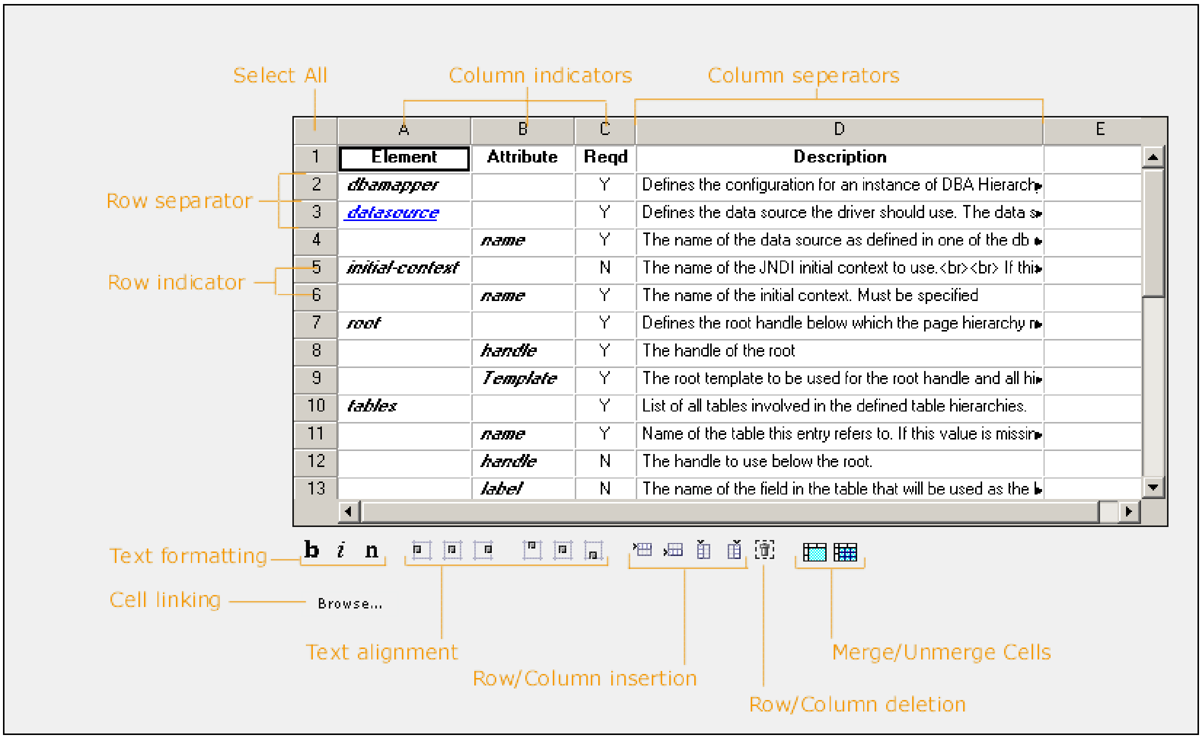


GUI Element	Description
Media Library Tree	In the left frame you will see the media library tree defined in the `Miscellaneous` section of the site view. To select a media library page simply click on the corresponding folder icon. This will update the media content frame on the right side.
Media Content Frame	In the right frame you will see all image and files (symbolized by an icon). The Images are shown as thumbnails of a fixed size. Please note that if the page has a large number of images it may take some time to build up the thumbnails the first time, so please be patient. After that, the thumbnails are cached and loading will be faster.

	To select the image or file you want to use simply click it. To see the information of an image or file simply place the mouse cursor over the image or file. A tool tip will appear showing the information.
OK	Closes the dialog and writes the information about the selected image or file back to the main edit dialog.
Cancel	Aborts the media selection and closes the dialog.

1.3.4.3.9. Table Control

The table control is a powerful Java applet that offers an Excel-like interface to create and edit the content for a table:



To edit the content of a cell, double click it with the left mouse button. To select a group of cells within the table simply left click one, hold down the mouse button, then drag the mouse to span a rectangle that encloses all the cells you want to select.

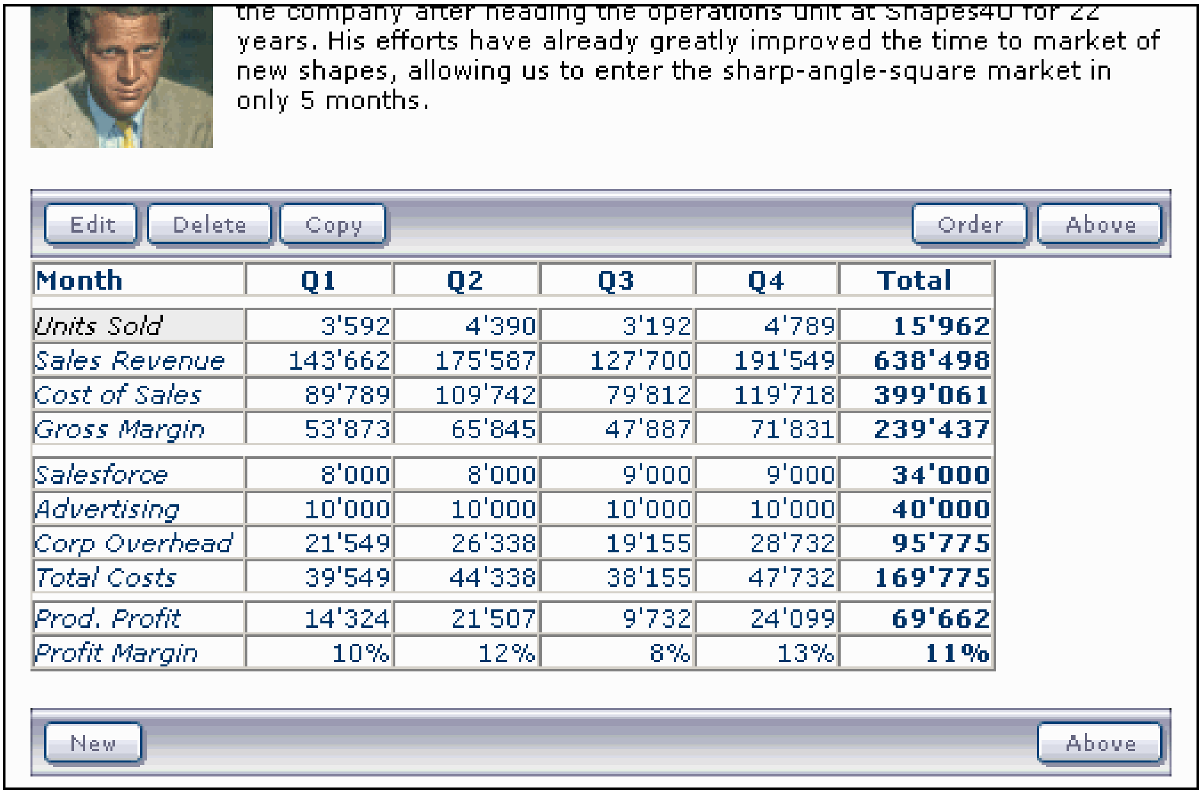
GUI Element	Description
Select All Indicator	Clicking on this indicator will select all the cells in the table.
Column Indicators	Clicking on a column indicator will select all cells in the corresponding column.
Row Indicators	Clicking on a row indicator will select all cells in the corresponding row.
Column Separators	Dragging a column separator left or right will resize the column left of it and move the columns on the right of it.
Row Separators	Dragging a row separator up or down will resize the row above it and move the rows underneath it.

Text Formatting	Highlight the cells you want to format and then use one of the three possible formattings: **B** = The text will be formatted to be bold. **I** = the text will be formatted to be italic. **N** = removes any applied formatting. Bold and italic can be combined.
Text Alignment	Highlight the cells you want to apply the alignment to and select one of the horizontal alignments (left, center, right) and/or a vertical alignment (top, middle, bottom).
Row/Column Insertions	You can insert new rows above or after the selected cells and you can insert a new column left or right of the selected cells.
Row/Column Deletion	Select the row or cell you want to delete and click on this icon to delete it.
Cell linking	If you want to link the content of one cell to another page, select the cell, then click on the `Browse` button. This will open a content browser dialog where you can either select an internal page to link to, or enter an external URL.
Merge/Unmerge Cells	Select the cells you want to merge and click the left icon. Select the merged cell and click the right icon to split it back to its original cells. Note : The first row and the first column are treated specially when merging : - Merging cells that are in the first is allowed. - Merging cells that are in the first column is allowed. - Merging cells that are in the first column and outside is **not** allowed. - Merging cells that are in the first row and outside is **not** allowed.

The following Key Shortcuts are available:

Shortcut	Description
Ctrl+c	Copy the selection.
Ctrl+x	Cut the selection.
Ctrl+v	Paste any previously copied or cut content at the selected location. You can also directly copy or paste a selection made in an Excel spreadsheet.
Del	Delete the selection.

The following is an example output of the table paragraph in the example project that comes with Communiqué that uses all available cell information:



Month	Q1	Q2	Q3	Q4	Total
Units Sold	3'592	4'390	3'192	4'789	**15'962**
Sales Revenue	143'662	175'587	127'700	191'549	**638'498**
Cost of Sales	89'789	109'742	79'812	119'718	**399'061**
Gross Margin	53'873	65'845	47'887	71'831	**239'437**
Salesforce	8'000	8'000	9'000	9'000	**34'000**
Advertising	10'000	10'000	10'000	10'000	**40'000**
Corp Overhead	21'549	26'338	19'155	28'732	**95'775**
Total Costs	39'549	44'338	38'155	47'732	**169'775**
Prod. Profit	14'324	21'507	9'732	24'099	**69'662**
Profit Margin	10%	12%	8%	13%	**11%**

The table control stores all information about each cell's content, width, height, text formatting and links. However, the control is not WYSIWYG capable. The output may or may not use all this information to render the table.

This depends on the template script that is responsible for rendering the table's content. So, check your project's user manual to see what you can and cannot use.

1.3.5. Editing Page Content with WebDAV

While the CMS offers a web-based approach to the editing of webpage content, you can also access the page content from Windows Explorer and **edit the page content using your preferred tool e.g. MS Word, MS Excel or any XML Editor**.

This is possible because the Communiqué 3 Delivery module implements the WebDAV protocol.

The official definition of WebDAV is: "Web-based Distributed Authoring and Versioning". It is a set of extensions to the HTTP protocol, which allows users to collaboratively edit and manage files on remote web servers. WebDAV allows you to manage your content inside Communiqué through Windows Explorer.

Whether WebDAV is enabled or not is project dependent, so you should check the project's user manual.

The following sections describe the general approach to connecting to a Communiqué Instance using WebDAV and how to edit the content using this method.

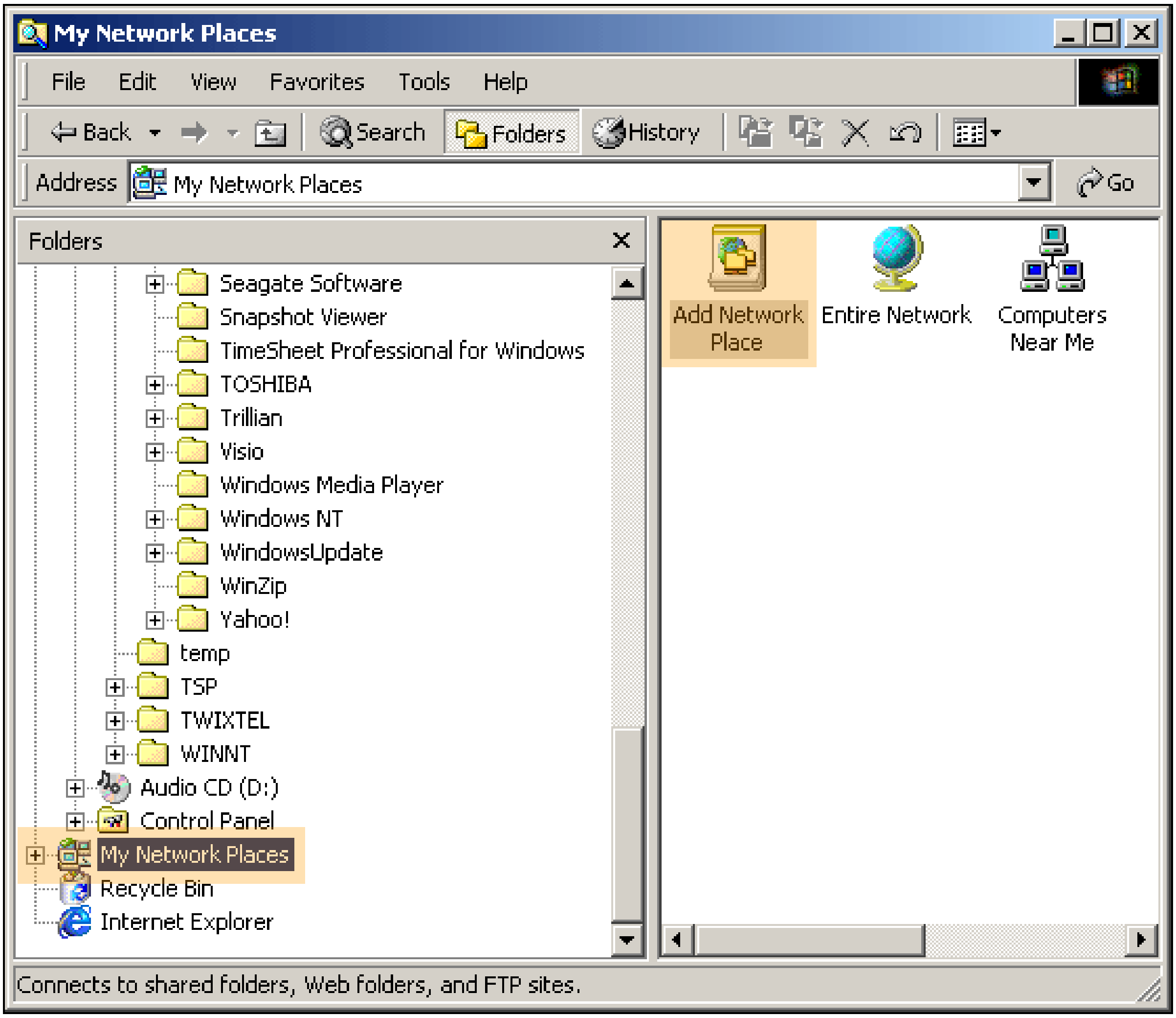
Editing Page Content with WebDAV

- Setting up WebDAV
- WebDAV Mapping and Content Editing

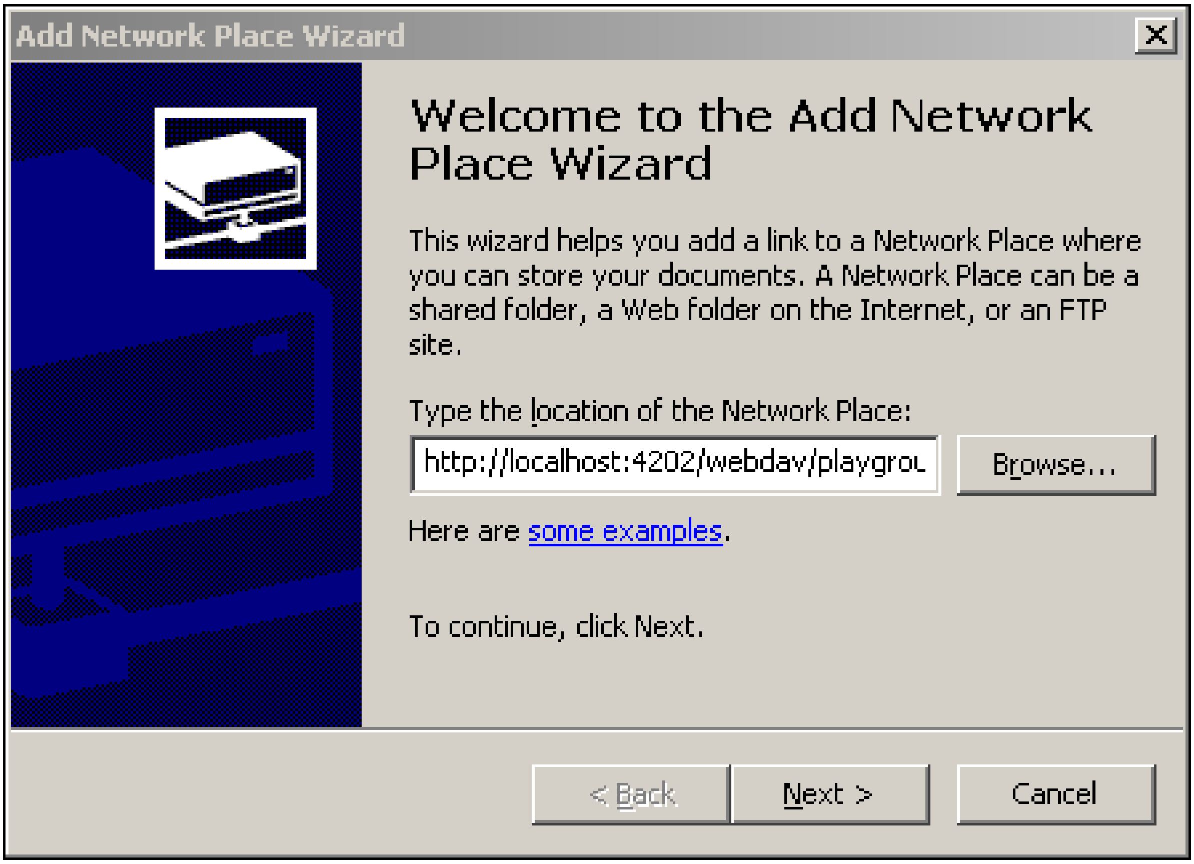
1.3.5.1. Setting up WebDAV

Configuring WebDAV in Windows means making the content stored in the content repository of the Communiqué instance visible in the Windows Explorer.

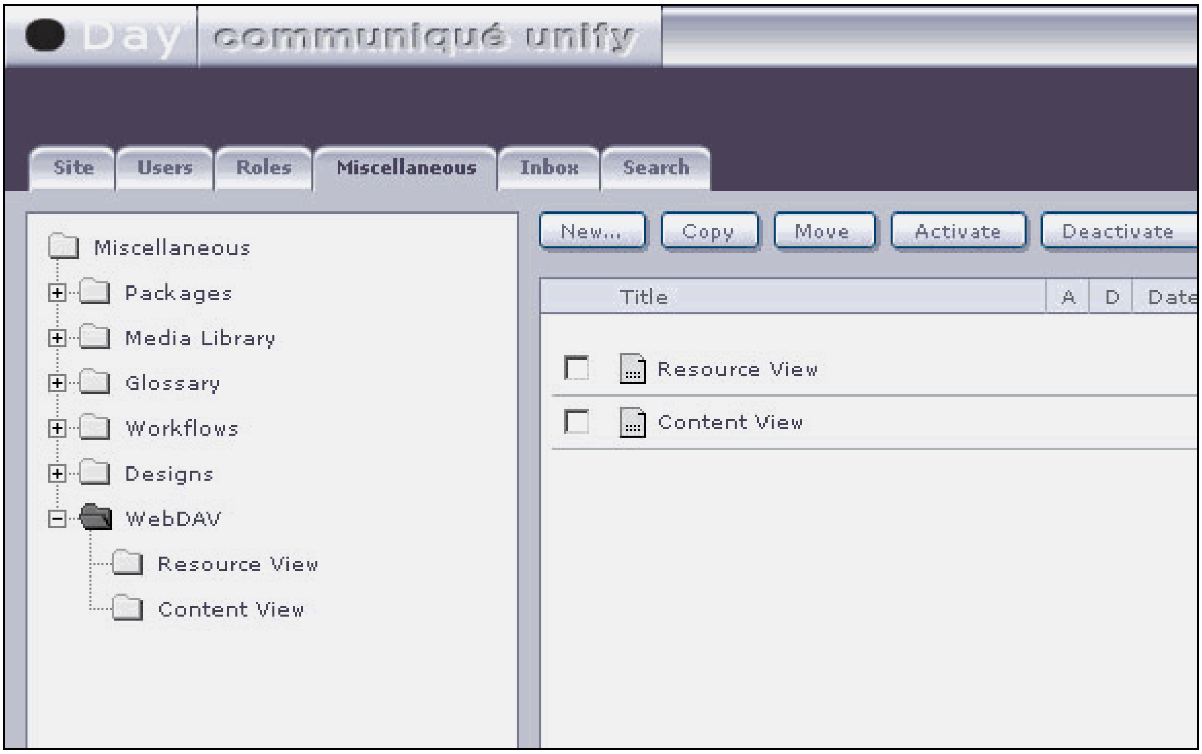
Open a Windows Explorer, select the **`My Network Places`** folder in the file tree and double click the **`Add Network Place`** icon:



This will start a wizard that helps you to add a link in the Windows Explorer to a network location:



To add the new location you must add a URL to one of the WebDAV templates located in the WebDAV tree in the **Miscellaneous** tab :

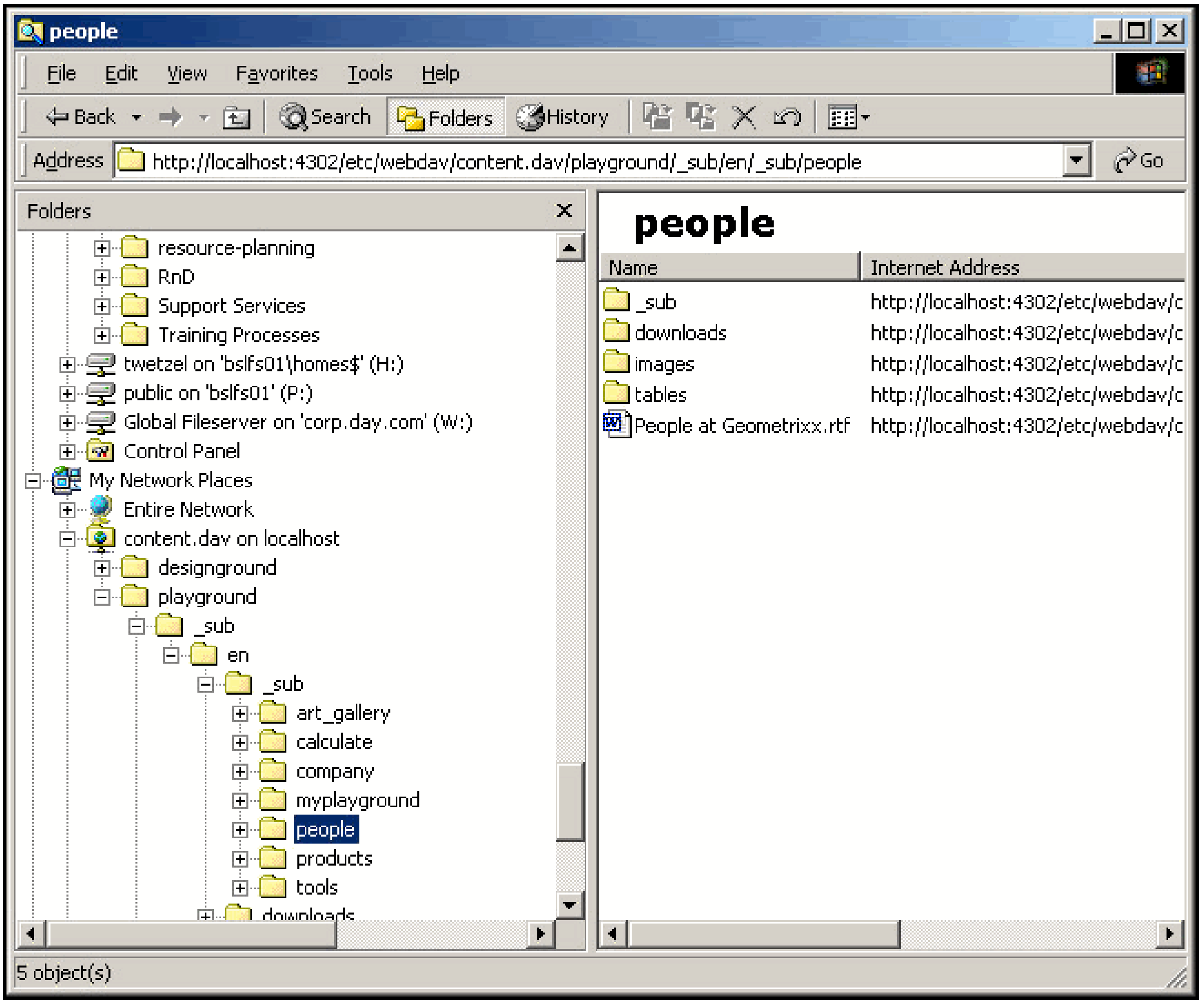


The number of WebDAV templates available is project dependent. You can get the URL by simply clicking on the WebDAV page. The page will show a message like in the following example :

Simply copy/paste the URL into the WebDAV Wizard. Click on the `Next` button and the wizard will try to connect. If the connection is established, then you will be asked to login. The login and password are the same one that you would usually use to access the authoring environment.

Of course, as with the standard non-WebDAV CMS, the username and password must be defined and you must have the appropriate rights to access the linked location, otherwise the login will fail.

If the login is successful, the new network connection will be added under the **`My Network places`** folder:



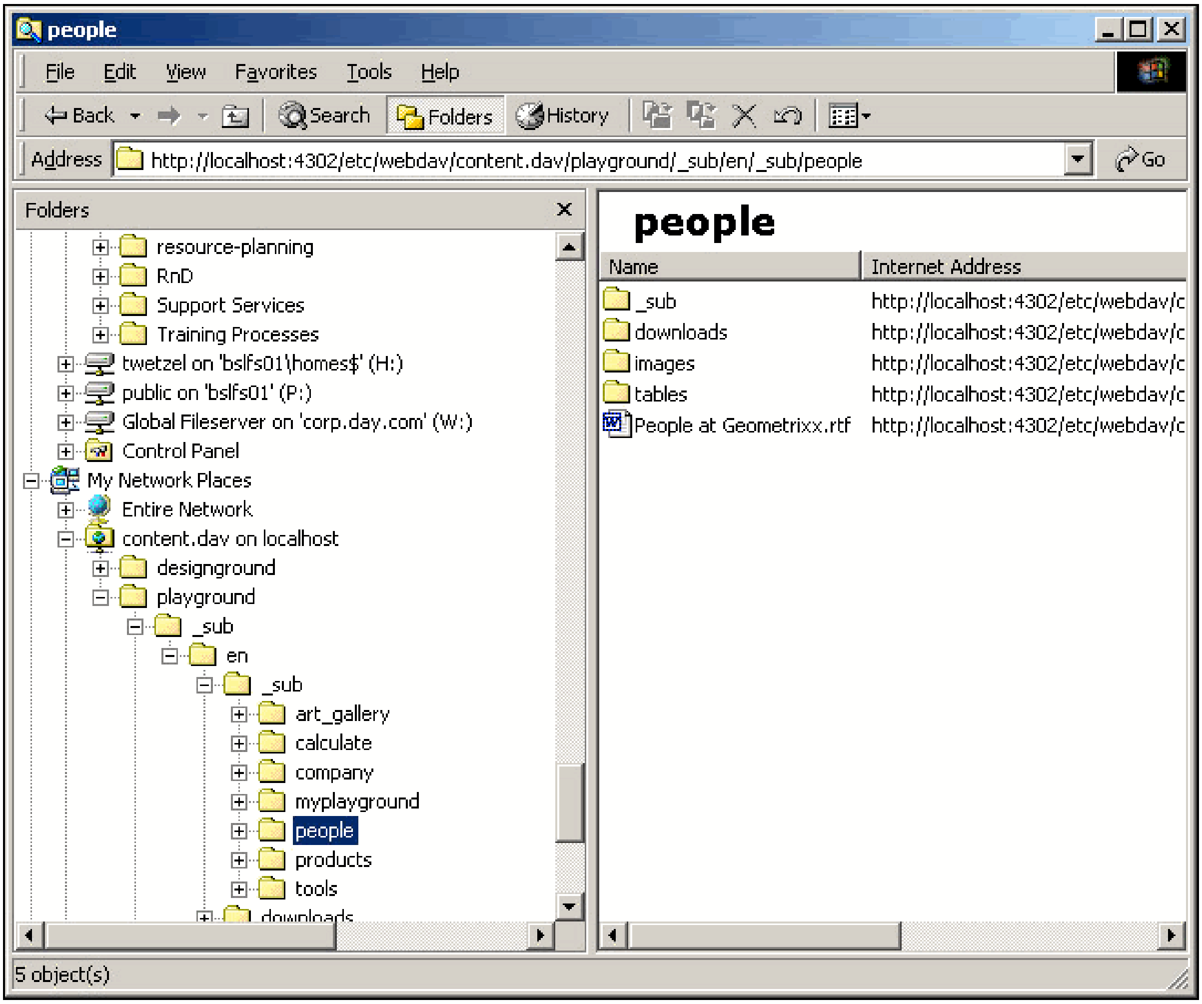
1.3.5.2. WebDAV Mapping and Content Editing

The mapping of ContentBus pages from the content repository into the Windows Explorer is completely **virtual**. This means that none of the folders or files shown physically exist anywhere.

Its simply a view on the content that is dynamically generated and updated by the WebDAV template that serves as an sort of gateway.

How the content is organised in the Explorer, what content is visible, what file types exist is completely defined by the selected WebDAV template. For example, the textual content of each content page may be shown as one RTF file or the text of a complete page tree may be in one XML file and the images might be embedded.

To demonstrate the idea lets take an closer look at the previous example using the Communiqué example project:

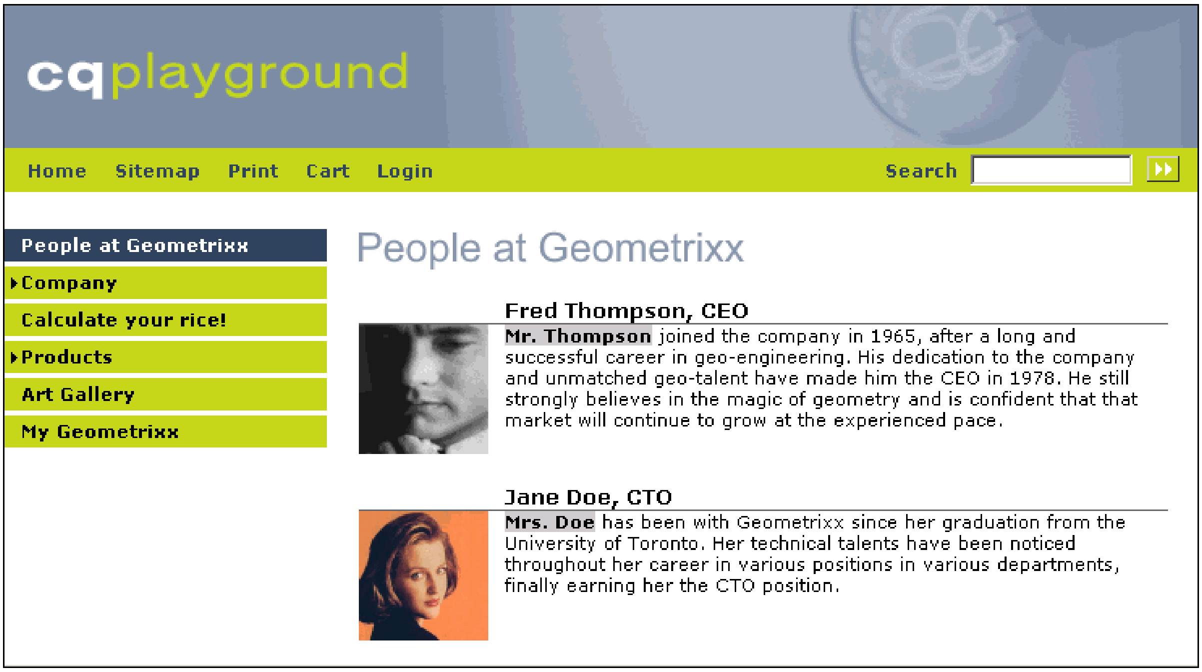


Here each content page that is connected is shown as folder. Inside this folder you will find different

representations of the same content page. Lets take a closer look at the content page :

`/playground/en/people`

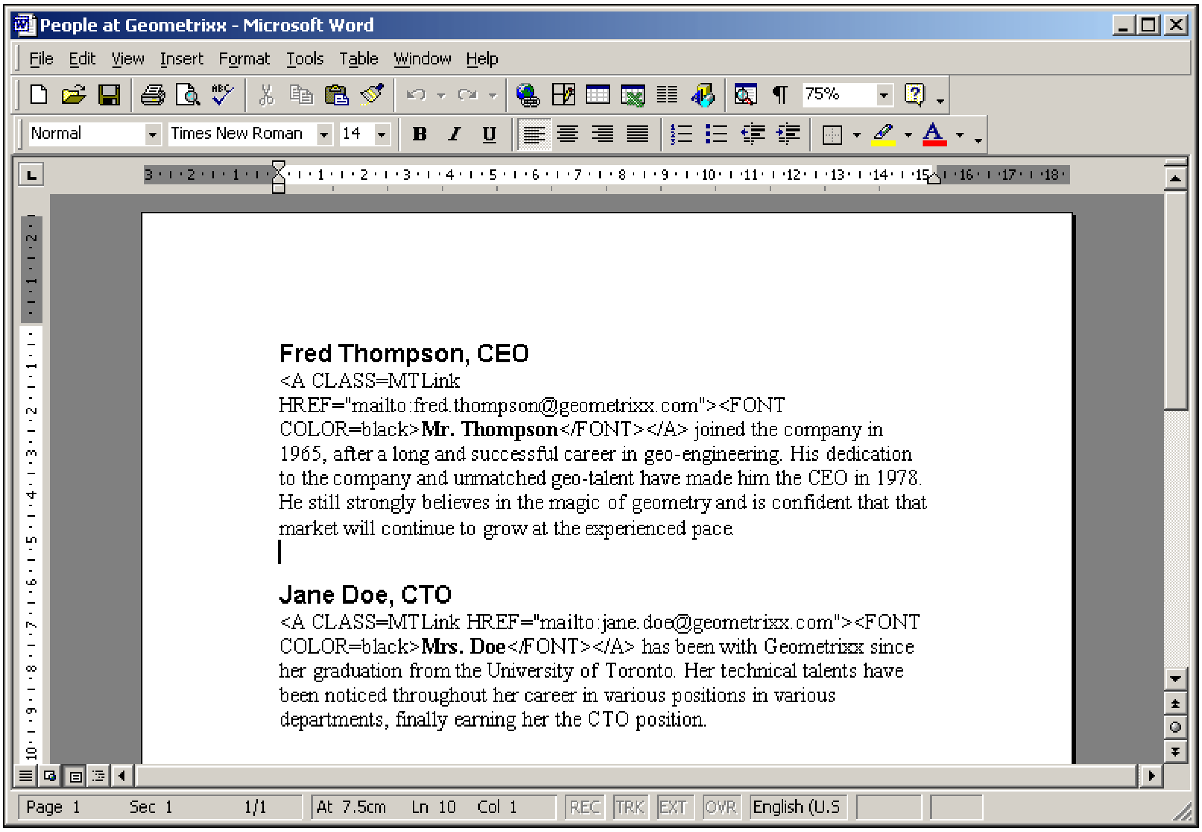
Online it looks as following:



In the folder mapped to the Windows Explorer you will find the following :

`People at Geometrixx.rtf`

This is an RTF version of the content page that can be opened with MS Word:



Keep in mind that the WebDAV template controls the output. Here the images are not translated into the RTF format and the HTML tags inside the text are not translated in to MS Word styles.

You can open the file with MS Word, edit it, and when you save it your changes will be written back to the page in the content repository.

Folder `tables`

This folder contain the content of each table paragraph in the form of an exel sheet. Open the sheet using MS Excel, edit it, save it and it will updated in the content repository. If you add a new exel sheet it will automatically generate a new table paragraph on the page in the content repository.

Folder `downloads`

This folder contains all files that are downloadable from this content page. You can simply update a file by replacing it. Note that you must keep the same file name. If you add a new file it will automatically generate a new download paragraph on the page in the content repository.

Folder `_images`

This folder contains all images that are uploaded on this page. You can open and edit this page with your preferred image editor. By saving your changes it gets updated in the content repostory.If you add a new image it will automatically generate a new image paragraph on the page in the content repository.

Folder _sub

This folder contains all its subpages as folders. Again, each folder contains representations of a content page as described. deleting the _sub folder is equal to deleting the complete tree in CMS.

If make changes to the content through WebDAV, you must reload the page in the browser to see the changes.

For any tool (file browser, text/image/spreadsheet editor etc.) to be able to access, edit and save content from a WebDAV location it **must** implement the WebDAV Protocol.

In Windows 2000 and later Windows operating systems, the MS Explorer implements this protocol. Since all MS Office products (MS Word, MS Excel, MS Powerpoint etc.) use functions of the Explorer to load and save their content, all of them can be used to edit content through WebDAV.

Other products may be able to open the file but can't save it. There are two workarounds for this :

- Copy the file you want to edit from the WebDAV folder to a local drive using MS Explorer. Edit it there and when finished copy the file back to its origin WebDAV folder using MS Explorer again.

- There are tools that map WebDAV folders as drives, for example WebDrive. This tools maps a WebDAV folder as normal drive to your system. So any tool can load and save like on a normal hard drive.

While the above example is a very common one, there are other possibilities as well. For example, the complete linked tree could be shown as one RTF file containing all pages hierarchically ordered by headings.

Check your project's user manual for details about WebDAV and how the content has been mapped into the Windows Explorer.

1.3.6. Editing Project Related Data

The CMS System offers a number of predefined templates to store project related data, which are not part of any specific project:

CMS Template	Location	Description
Package Definitions	`/etc/packages/`	The site view and user view both have functions enabling the replication of both content and users to other Communiqué instances. But you may also want to replicate content that does not belong to either of these two types. For example, when templates have been updated or new static icons or images have been added, you may want to push these changes to connected Communiqué subscribers, thus updating them. The package template works like a ZIP File. You define the content pages belonging to the package, than you replicate the package to the Communiqué subscribers, where the package automatically gets unpacked again.
Media Library	`/etc/medialib/`	Using the media library templates you can organize all the images, icons, files etc. that can be used inside the content pages directly on the server itself instead of having them scattered on different local systems. There is a special content page editing control, the media library control, that is used to select a media object from the library and place it in the content page.

		In this way you can build up an image library that is controlled by the design department and replicate it to other Communiqué instances.
Glossary	`/etc/glossary/`	Glossary templates allows you to build up project-wide keyword lists. The keywords can then later be associated with content pages. This way you can build up a central keyword or glossary list that is approved by the marketing department and replicate them to other Communiqué Instances.
Workflows	`/etc/workflows/`	You can have different workflow processes for different kinds of content pages. Each process is defined in a separate workflow template and can be replicated to other instances to be used there.
Designs	`/etc/designs/`	If you have installed the Designer, all available designs will be stored in this section. There is always at least one page labeled, Default Style Values.You can add new designs be creating new design pages.
WebDAV	`/etc/webdav/`	To make content available through the WebDAV protocol a template is required that serves as a gateway to deliver and update the content upon changes. The default installation offers two templates, one that maps the content of the example project named **Content View**, and a second one that maps all resources of the system (scripts, templates, fonts, images etc.) named

		Resource View. The second one is intented for developers so they can use their prefered tools for development. It **must** be removed on non development installation to avoid missuse.
Multi Site Manager	`/etc/multisitemanager`	With the multi site manager, you can manage different sites, which should always have the same structure and, in some parts maybe, the same content. This is useful, if you have a company with different sites and each site should be represented on the company website, with mostly the same content but also some differences. Or for documentation of different versions of a product like you can see here at docs.day.com. In the multi site manager, you can define a master site and configure different behaviours for different content nodes.

Under each of those sections you can add as many sub pages as you like to organize your content.

1.3.6.1. Package Definitions

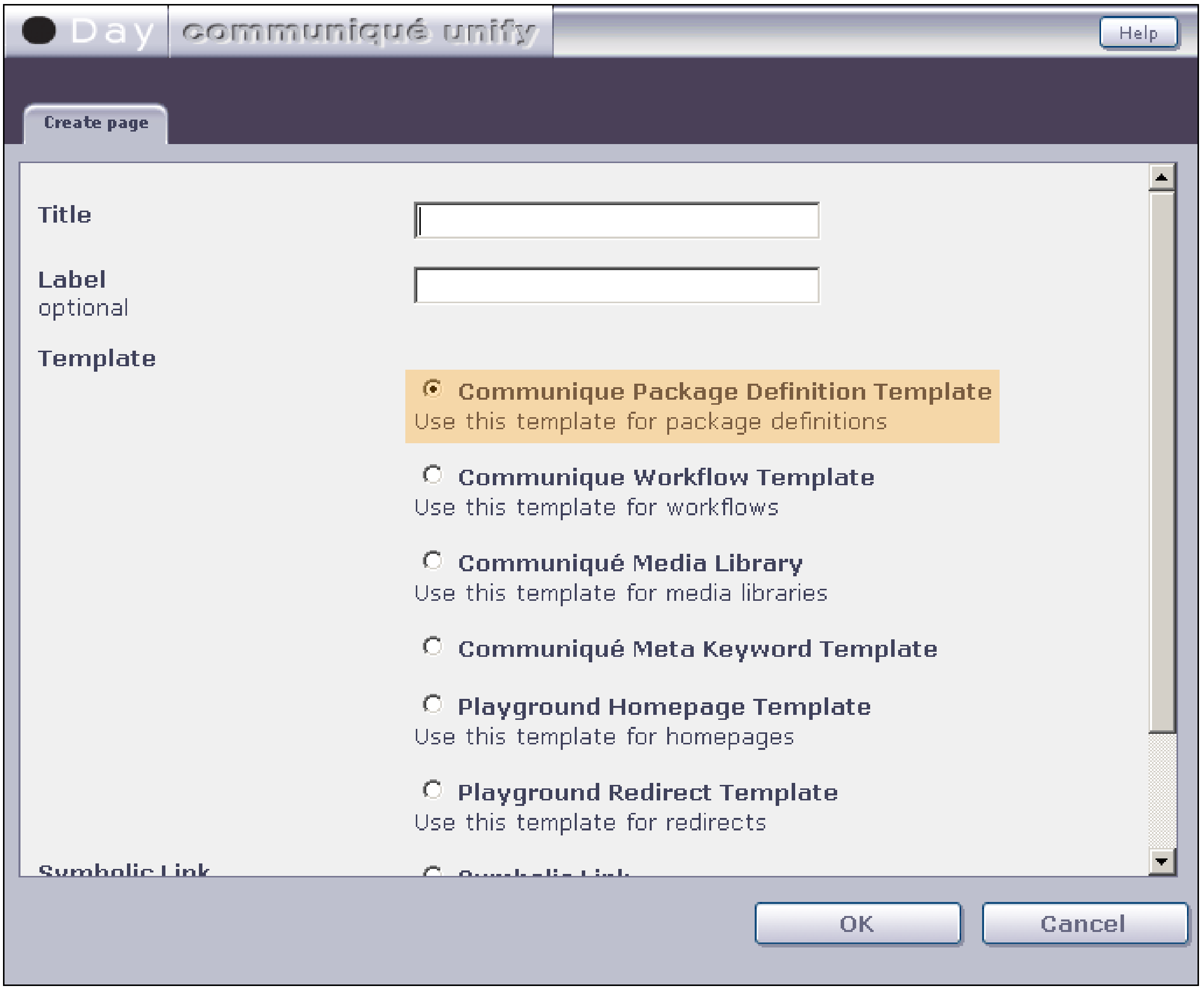
A package definition is used to bundle content from throughout the content repository into a single unit. This unit can then be used to:

- **Replicate content** to other Communique instances.
- **Create or restore a version** of the bundled content.
- **Create a snapshot or backup** of the bundled content.

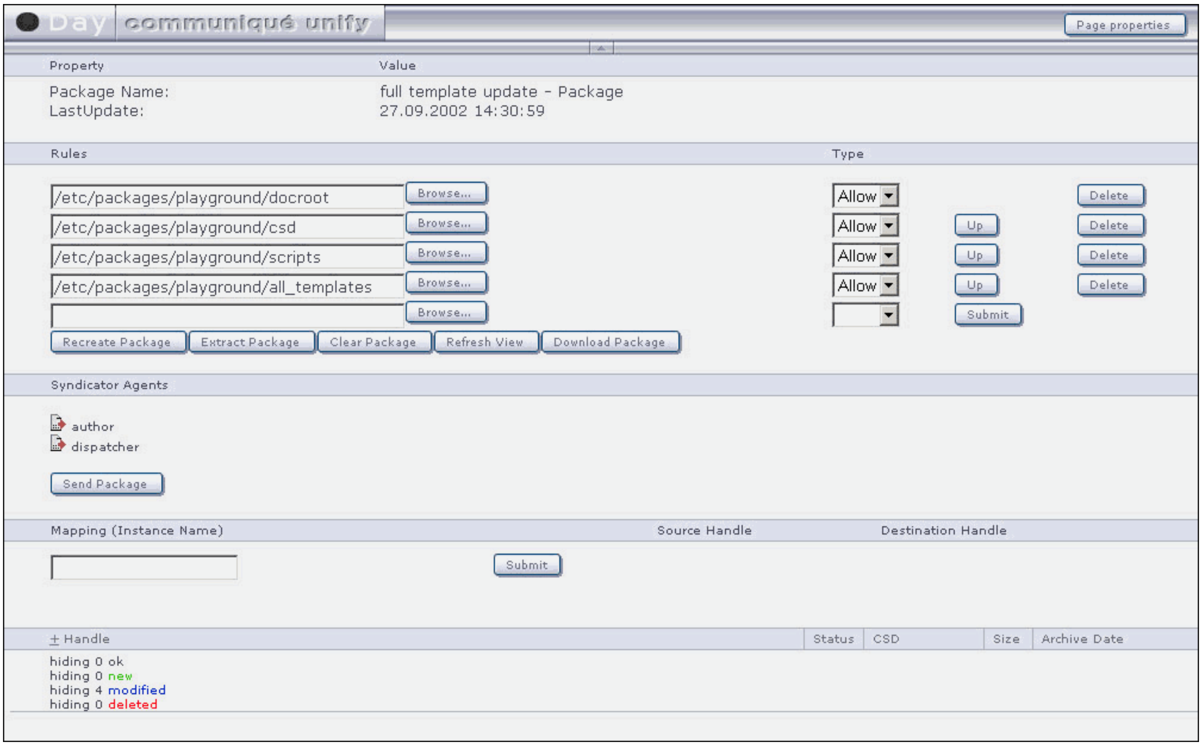
The composition of a package is up to the user. For example, a user might want to make a package of:

- Various sections of the project content, thus allowing replication in a single step instead of through several Activate and Activate Tree actions.
- All templates, CSDs and scripts in a particular Communiqué instance, allowing other Communiqué instances to be updated with them in a single step.

To add a new package you simply create a new package page under **`/etc/packages`** using the **package definition template**:



The package definition template has the following interface:



GUI Element	Description
Package Name	The package name. It can be edited in the Page Properties of the package page.
Last Update	Date and time when the package content was created/recreated last time.
Rules	The list of content page handles that should be included in the package. You can use the wildcard symbol * . Please note that the **order of the rules added is important** because they are evaluated sequentially and content pages are either added or removed from the resulting list depending on the **Type** set.
Browse	Opens a content browser to select the handle. If you want to reference content outside of the content browser you must enter the handle by hand.
Type	The referenced page(s) should either be added or removed from the package. **`Allow`** : adds the page(s) referenced by the handle to the package.

	Deny : removes the page(s) referenced by the handle from the package.
Delete	Deletes the rule from the list.
Up	Moves the rule up in the rules list.
Submit	Add the new rule to the rule list.
Recreate Package	This will copy all the content pages into the package. If the package has already been created the previous version is discarded and the latest versions are retrieved from the ContentBus. All pages will then be assigned the status **ok**.
Extract Package	This will unpack the package and restore the state of the content pages as it was at the date of the package creation. What it does is: - All modified pages (status: `mod`) get overwritten with the package version. - All pages that have been deleted (Status: `del`) after the package creation date get restored. - All pages that would be part of the package but were created after the package creation date (status: `new`) get deleted.
Clear Package	Clears the content of the package. All pages that would belong to the package get status **new**.
Refresh View	Reloads the page to update the status of the contained pages.
Download Package	This allows you to download the package to your local harddisk. The filename by default is set to : `<package_page_label>.<YYYYMMDD>.cq` but it can be changed in the `File Save` dialog. The downloaded package not only contains all pages belonging to the package but also the package page itself. So if you upload the package on a different system using the Upload Package function, the package page itself gets created there as well.

Syndicator Aagents	All delivery agents that are allowed to send the package page are listed.
Send Package	Will send the package to the listed subscribers where the package automatically gets unpacked. This of course only works if the subscriber is another Communiqué 3.x Instance.

Mapping (Instance Name)	Sometimes you might want to use different versions of one file depending on the system the package get send to. For example:
	
	You have a configuration file in your package, where the configuration settings differ depending on if installed on an authoring or a publish instance. Then you would do the following:
	
	- You create two versions of the config file and add it to your package, for example :
	
	`/config/delivery/mapper_publish.xml`
	`/config/delivery/mapper_author.xml`
	
	- Next you add a Communique Instance name in the **Mapping** section:
	
	`*publish`
	
	and press the **Submit** button. Note that you can use the wildcard symbol `*`. Next to the mapping you can now start to add source and destination handles.- For our example we would add in **Source Handle** :
	
	`/config/delivery/mapper_publish.xml`
	
	- The **Destination Handle** would be :
	
	`/config/delivery/mapper.xml`
	
	- Click on the **Submit** button to add your source/destination handles to this mapping.
	
	This procedure is repeated for the other version of the file but with a different instance mapping, for example ***author**.
	
	What will happen if the package gets send to subscribers ?
	
	If the subscribers instance name matches with one of the mappings, for example if the instance name is `live_publish` it would match with

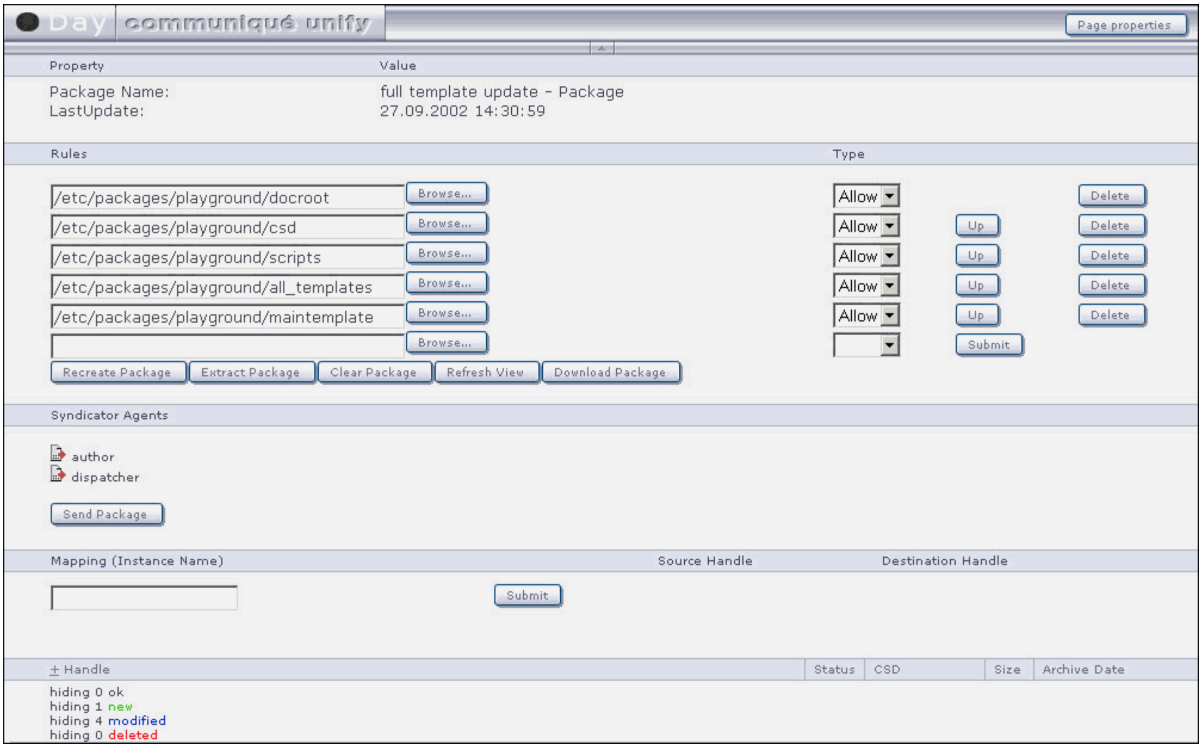
	`*publish` from the above example, then all source pages defined for this mapping get unpacked to the destination handle.
Handle	The handle of the content page that is part of the package. You can use the +/- icon left of the Handle title to either show the list of all pages in the package or an overview listing the number of ok,new, modified and deleted pages.
Status	The status of the page compared to the version in the package : **`ok`** : The version in the package is the same as the one in the content repository. **`mod`** : The version in the package differs from the current version in the content repository. **`del`** : The version in the package does no longer exist in the content repository. **`new`** : The page is not in the package because it was added after the last creation of the package.
CSD	Content Storage Definition that is used for this content page. The CSD defines what kind of content is stored in a page.
Size	Size of the content page in KBytes.
Archive Date	Exact date and time when the page was added to the package.

When you start adding rules to the package, all the content pages fitting this rule get listed, but not yet added to the package. They all get the status **`new`**. You have to click on the **`Recreate Package`** button to actually add the content of these pages to the package.

If you later add new rules, the pages are again shown in the list and their status is again set to `new`. To add their content to the package you must recreate the package.

In the Page Properties of the package page you can use the VersionWarp to get previous versions of the package.

If you add a package page to another package, for example:



Then all package actions you perform on the super package will subsequently be executed on the sub packages.

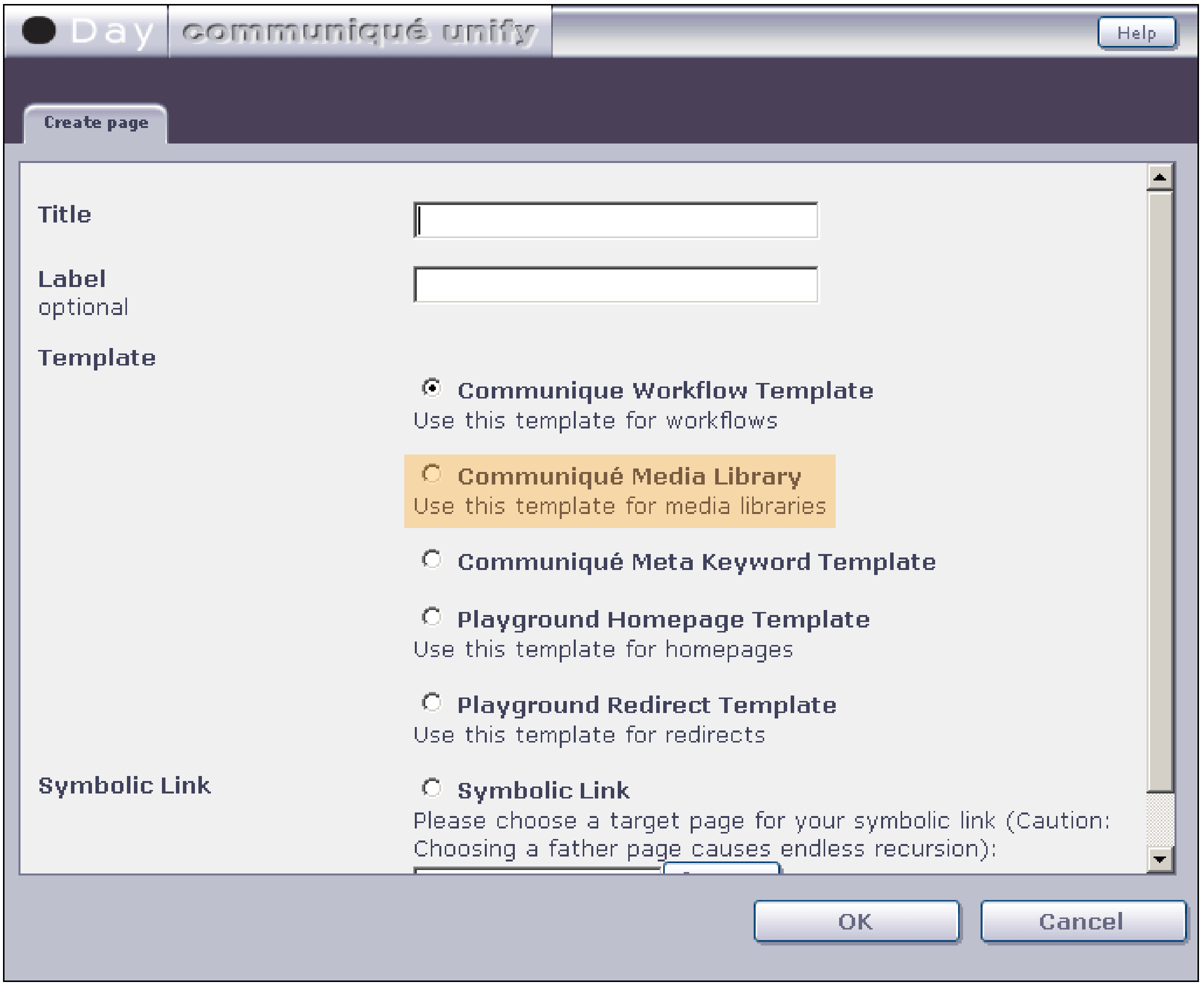
For example, if you recreate the super package, it will first recreate all sub package pages and then update itself.

1.3.6.2. Media Library

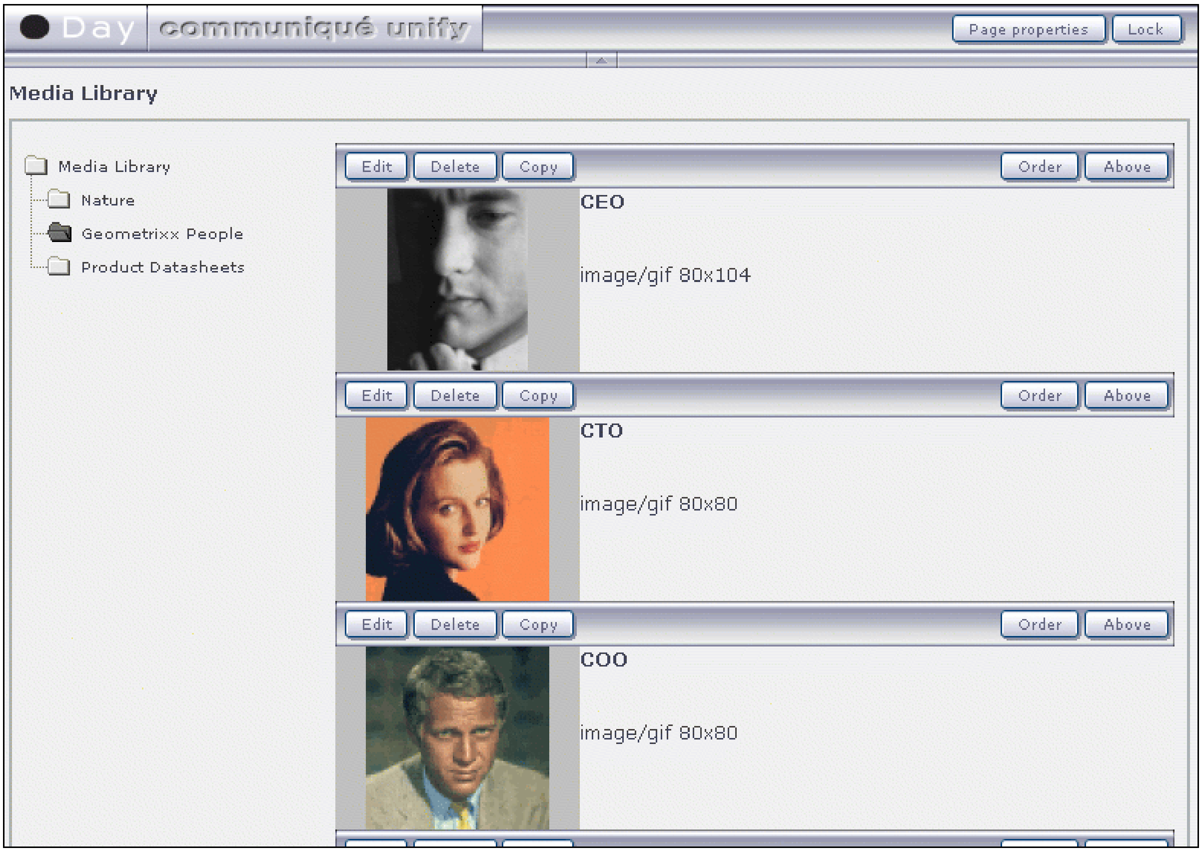
The Media Library templates allow you to centrally store and manage various kinds of images and other files that can be used throughout your website. Such media files might include background images, company logos, product images, downloadable documents, and so forth.

Access to the library is provided via a special media library control that can be included in the script that produces a content page.

To add a new page to the media library you simply create a new library page under **`/etc/medialib`** using the **media library template**:

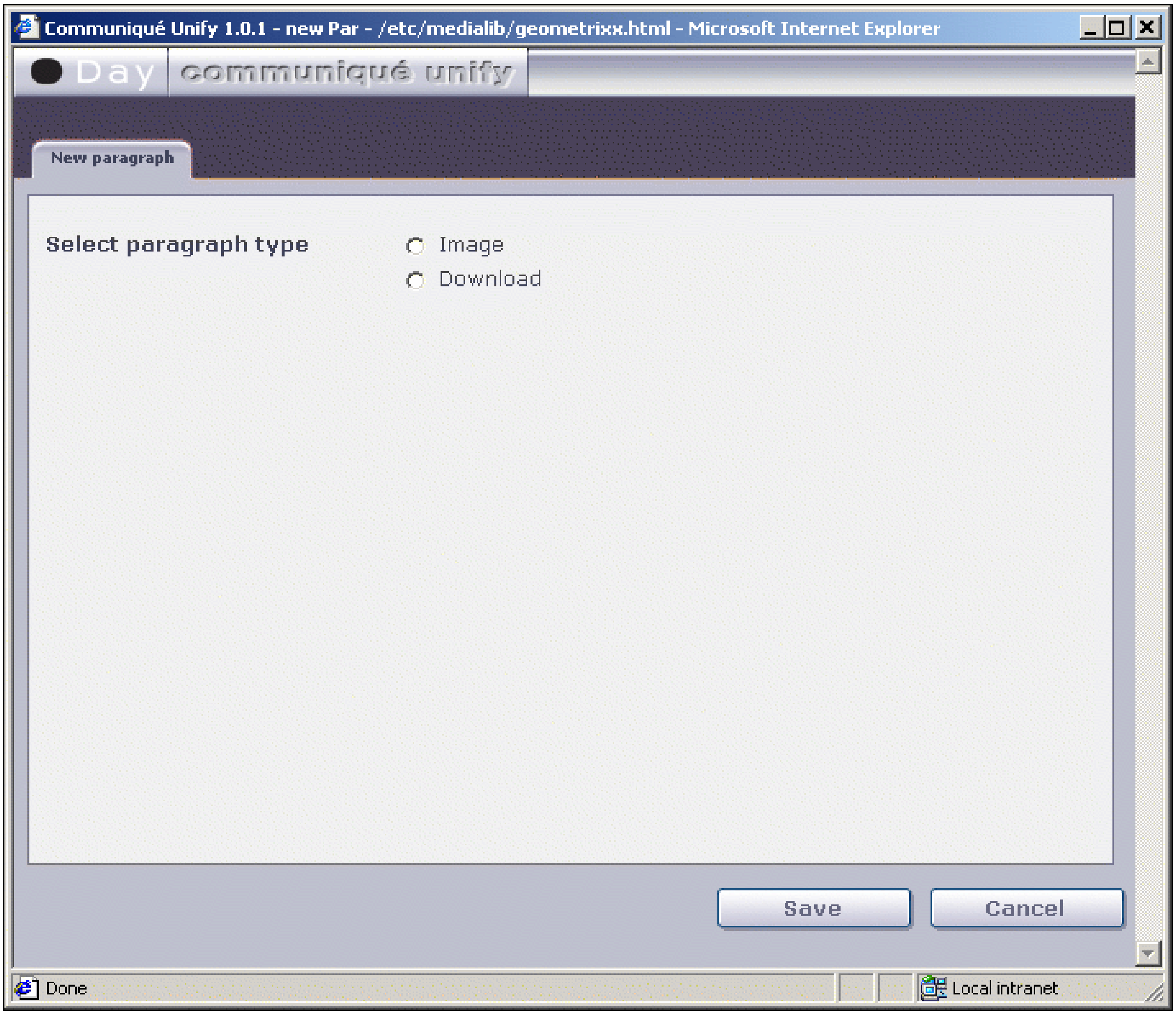


The Media Library template has the following interface:



GUI Element	Description
Media Library Tree	The tree on the left side helps you to navigate through the different media library pages without having to switch back and forth from the site view to open another media page.
Media Files	On the right side the media files of the page are listed in paragraph form.

To add a new media file to the library page simply click on the **New** button at the bottom of the media files listing. The following dialog will open:

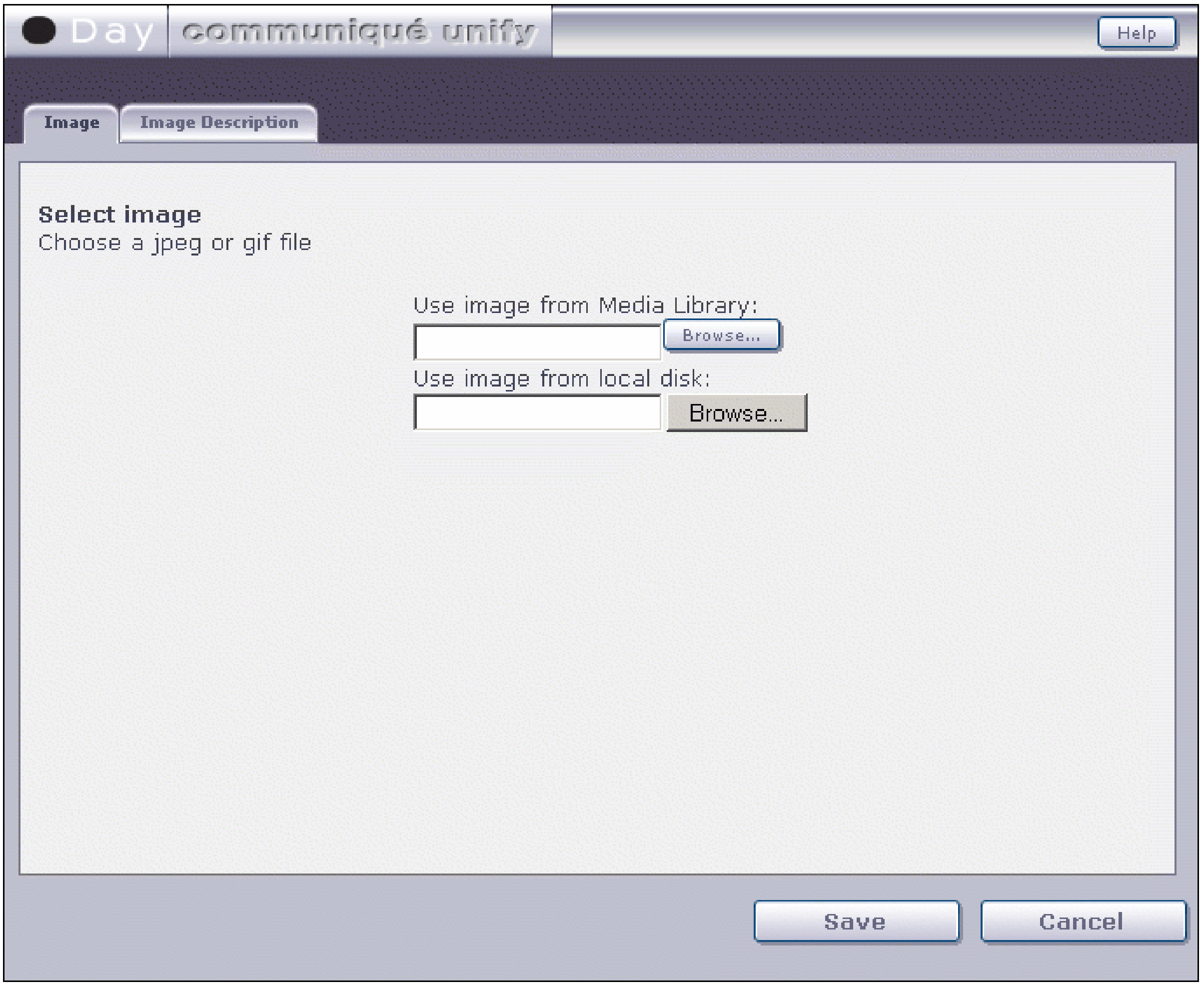


GUI Element	Description
Image	Select this radio button to add a new image to the library.
Download	Select this radio button to add a new file for downloading to the library.

As soon as you select one of the radio buttons the dialog will reload showing a different dialog depending on the file type.

Uploading an Image

If you selected to add an image to the library the following dialog will appear:

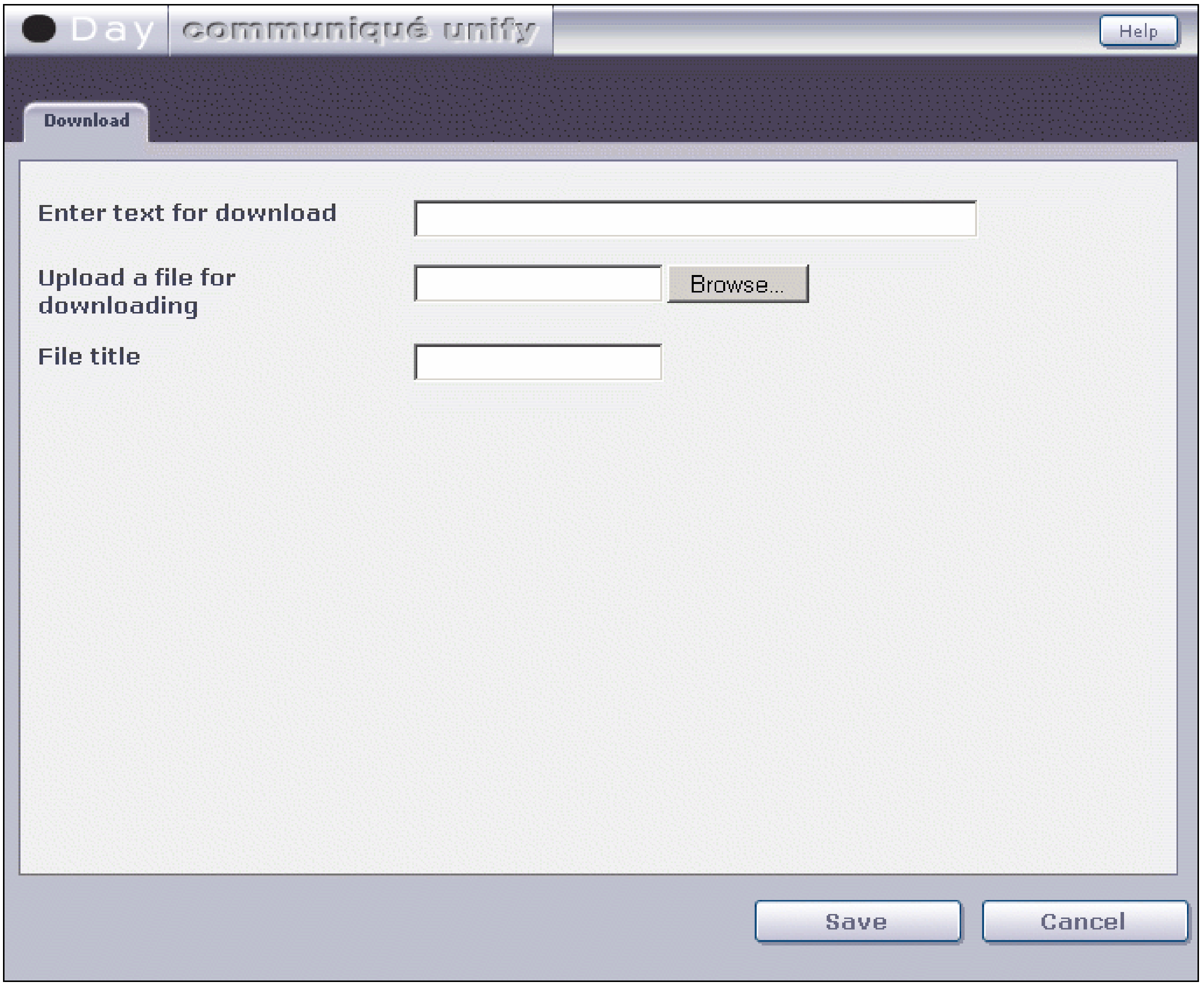


You can either choose to upload an image from your local file system or to copy an image from another media library page.

On the second tab you can edit the title and description of for the image. This will be shown next to the image together with the image type and size info.

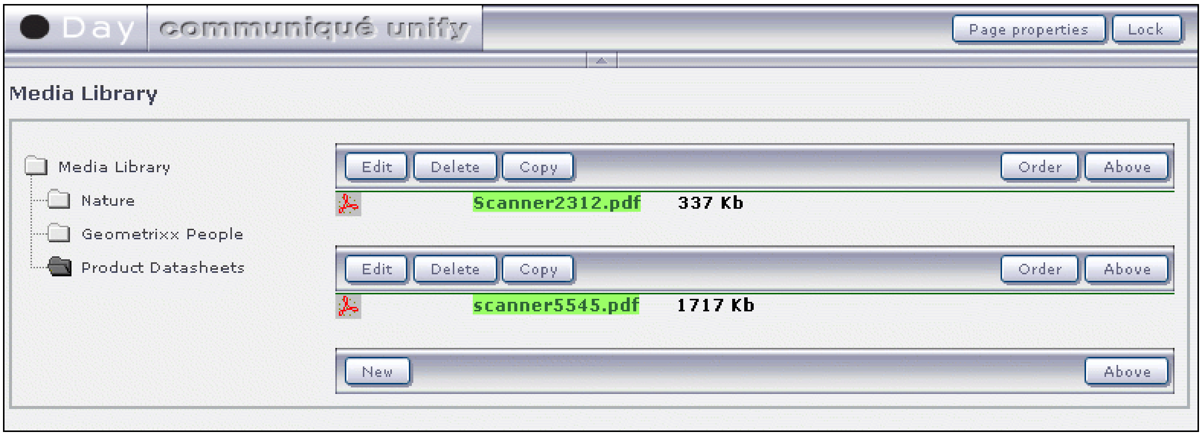
Uploading a File

If you selected to upload a file the following dialog will appear:



GUI Element	Description
Enter Text for Download	Text that will be shown next to the file icon in the media library page.
Upload a file #	Use the **`Browse`** button to locate the file on the local file system.
File Title	Will automatically be preset with the filename of the file you want to upload. If you want another filename to be used when downloading the file you can enter the name here.

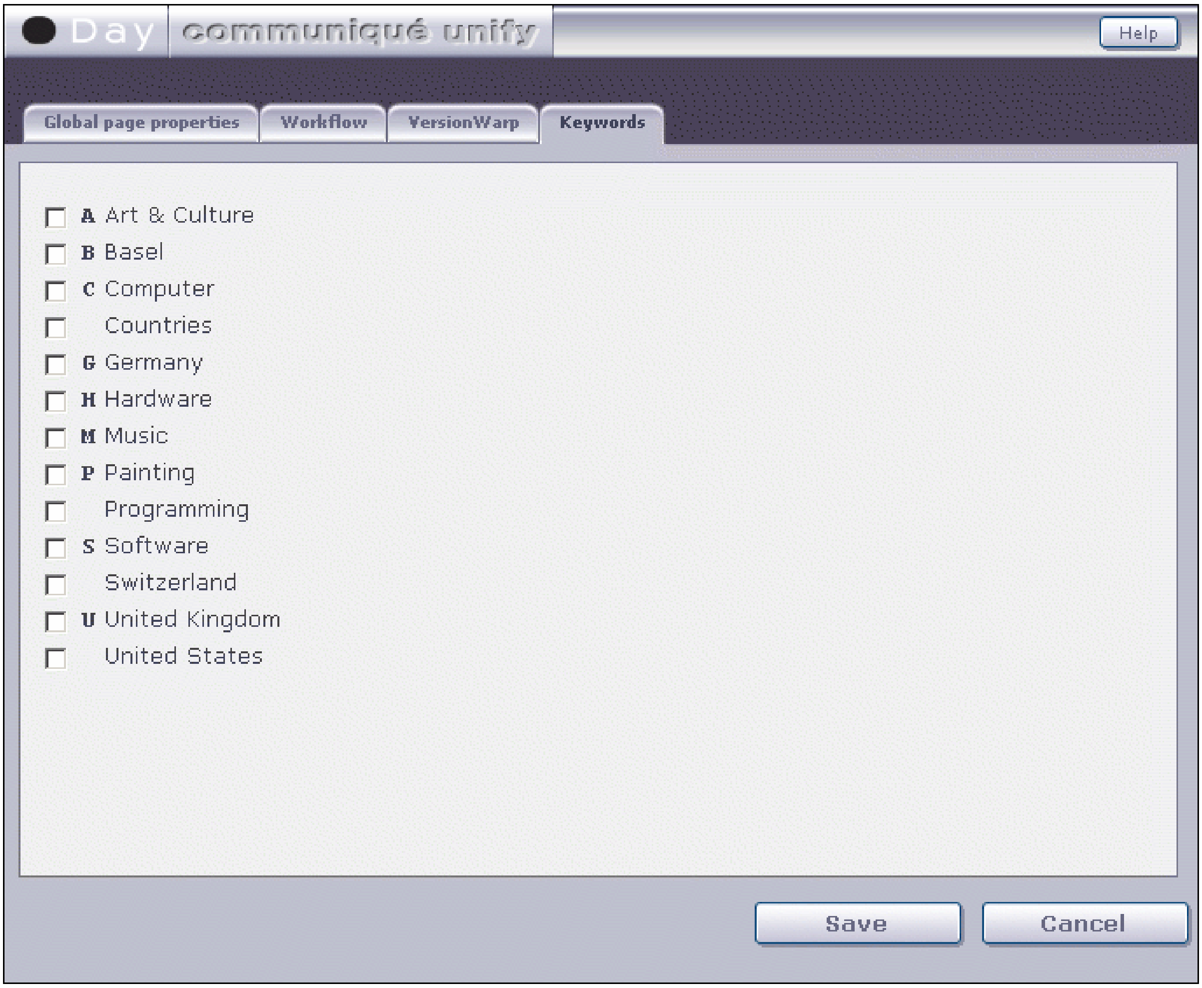
Files are shown in the media library pages by an icon, a download link and the description:



In the Page Properties of the media library page you can assign the page to a workflow and retrieve previous versions using the VersionWarp.

1.3.6.3. Glossary

The glossary/keyword templates allow you to centrally store and manage keywords that can be assigned to content pages. Keywords can be assigned to pages in the Page Properties dialog:

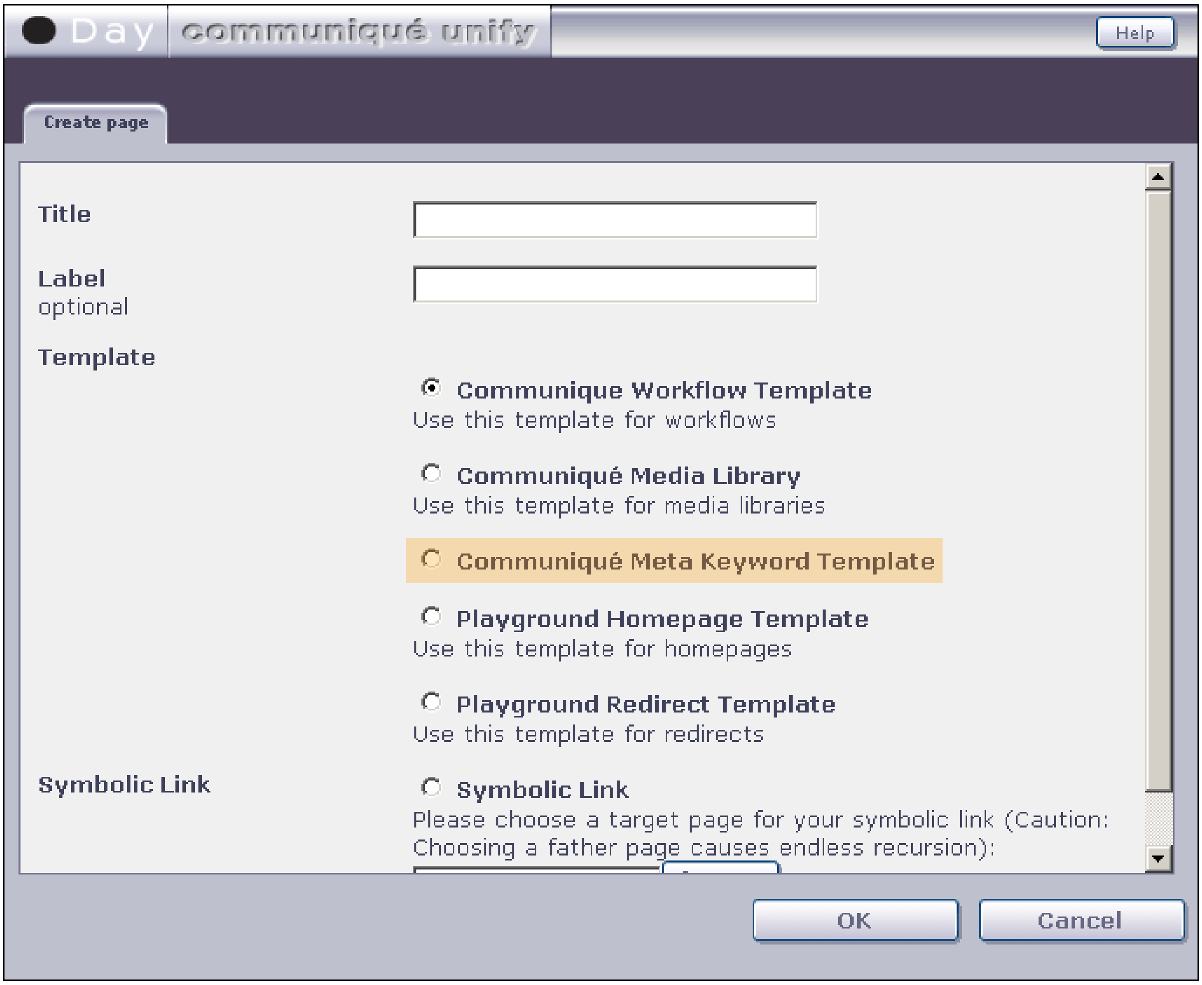


This tab may not be available for all templates in the project.

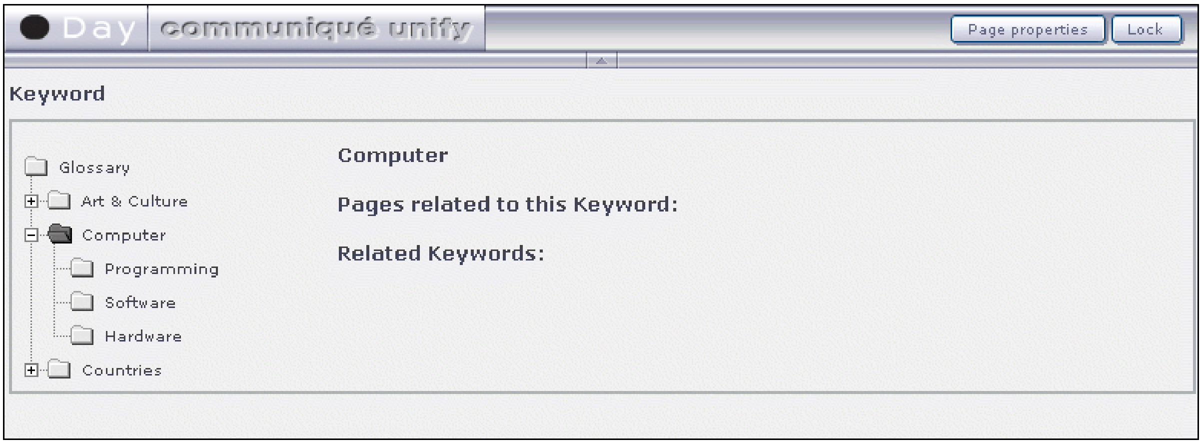
Here you can check all keywords that should be associated with the content page. How the content page handles this information is template dependent. Possiblities include:

- The keywords get stored as hidden or visible content in the page. In this way the Communiqué search can find the pages if the assigned keyword is searched.
- The keyword gets added to the HTML `<META>` tag. This is used by external search engines like to index the page.

To add a new keyword, you simply create a new page in **`/etc/glossary`** section using the **Keywords template**:



The title will be the new keyword entry. The keyword template has the following layout:



GUI Element	Description
Keywords Tree	Shows all keywords defined in the glossary. You can use it to navigate through the keywords tree without having to switch back and forth to the

	site view to open another keywords list.
Pages related to this Keyword	A list of all content pages that are associated with this keyword.
Related Keywords	In the Page Properties of the keyword page you can associate the page itself with other keywords. This information may be used by the templates to list the related keywords as information on the page.

In the Page Properties of the keyword page you can assign it to a workflow and use the VersionWarp to retrieve previous version of the page.

1.3.6.4. Multi Site Manager

Multi Site Manager

- Introduction
- Use Cases
- Overview
  - Setting Inheritance Constraints
  - Testing and Using Inheritance Constraints
  - Language coherence

1.3.6.4.1. Introduction

Goals

Many organizations, both commercial and governmental, are today moving towards consolidating their web infrastructure. Done correctly, this kind of consolidation can provide a number of benefits, such as:

- Centralized hosting (IT infrastructure).
- Greater control over corporate design and corporate identity.
- The sharing of workflows across formerly separate parts of the organization.
- The sharing of functional components (navigation, applications, etc.) among formerly separate websites.

and last but not least:

- The sharing of content (both mandatory and optional) across various sub-sites

The Multi-Site Manager is geared towards addresses all the issues surrounding the mandating of content from a master site to any number of sub-sites.

Guiding Principles

The Multi-Site Manager (MSM) allows control of any number of sub-sites through a central master site through a mechanism of content inheritance.

There can be a number of master sites in any communiqué instance that apply to there respective sub-sites. So there could be a master site that defines how the "country" sites of a corporation look and on top of that every "country" site could define a master for its "dealer" sites.

The Multi-Site Manager allows centralized manipulation of "mandatory", "auto-created" and "optional" content and content structure.

1.3.6.4.2. Use Cases

Multinational Site

ENT Corporation, a large distributed enterprise, has a large number of subsidiaries in various countries. All of them share similar look-and-feel (which is provided through the "Communiqué Designer"). These sites share various components with one another and most are centrally hosted.

Corporate Communications at ENT can use the MSM features to propagate press release content to all the various press release pages of each of the country websites. This is done simply by making the press releases section of the master website a "mandatory content" section.

Additionally, the Knowledge Management department at ENT has gathered a large collection of FAQs that apply to most countries. To allow the surfer to stay in his or her respective country website yet have access to the FAQ appropriate to that country, this content can be offered as "optional content" on the MSM master site. This allows the owner of a particular country site to subscribe to the content if it is appropriate for them. The content is not "forced" on the owner of a site.

Some time later, due to a reorganization of the site, the press releases section is moved to a different location in the navigation on the master site. Due to MSM, this change is reflected automatically in all the subsidiary sites.

Multilingual Site

UNORG, a multinational organization, hosts a website in 15 languages.

Experience has shown that multilingual websites often share a number of characteristics:

- Content trees are not identical in different languages.
- There is almost never a "lead" language in which all the content is available.
- It is not just about text (images mean different things in different cultures).
- Internal document structures (content objects) in different languages, or even different geographies with the same language, are often different. For example, due to differing legal requirements.
- The "if-language-is-not-there-then-switch-to-default-language" scenario almost never works. (A French surfer doesn't appreciate suddenly being thrown into an section of English content)

But, despite all these differences between different language sections, there is also a certain coherence between the languages that needs to be maintained.

The Language Manager monitors the differences between language sections and allows for the clean up any differences between the various language trees, thus helping to keep the sections synchronized.

Multinational Multilingual Site

ENT Corporation, a large distributed enterprise, with a large number of subsidiaries also has a number of subsidiaries in countries like Switzerland, Belgium and Canada that have to support a number of different languages per site national site. But the set of supported languages per site must be decided on a per country basis.

The combination of the Language Manager and the Multi-Site Manager allows for precise control of which content is visible in which country and how the various languages are managed and kept synchronized on a per country level.

1.3.6.4.3. Overview

Overview

- Setting Inheritance Constraints
- Testing and Using Inheritance Constraints
- Language coherence

1.3.6.4.3.1. Setting Inheritance Constraints

Creating a new Multi-Site Manager Constraint Page

To start using the Multi-Site Manager an inheritance constraint schema has to be set up that can be reapplied to all the different sub-sites.

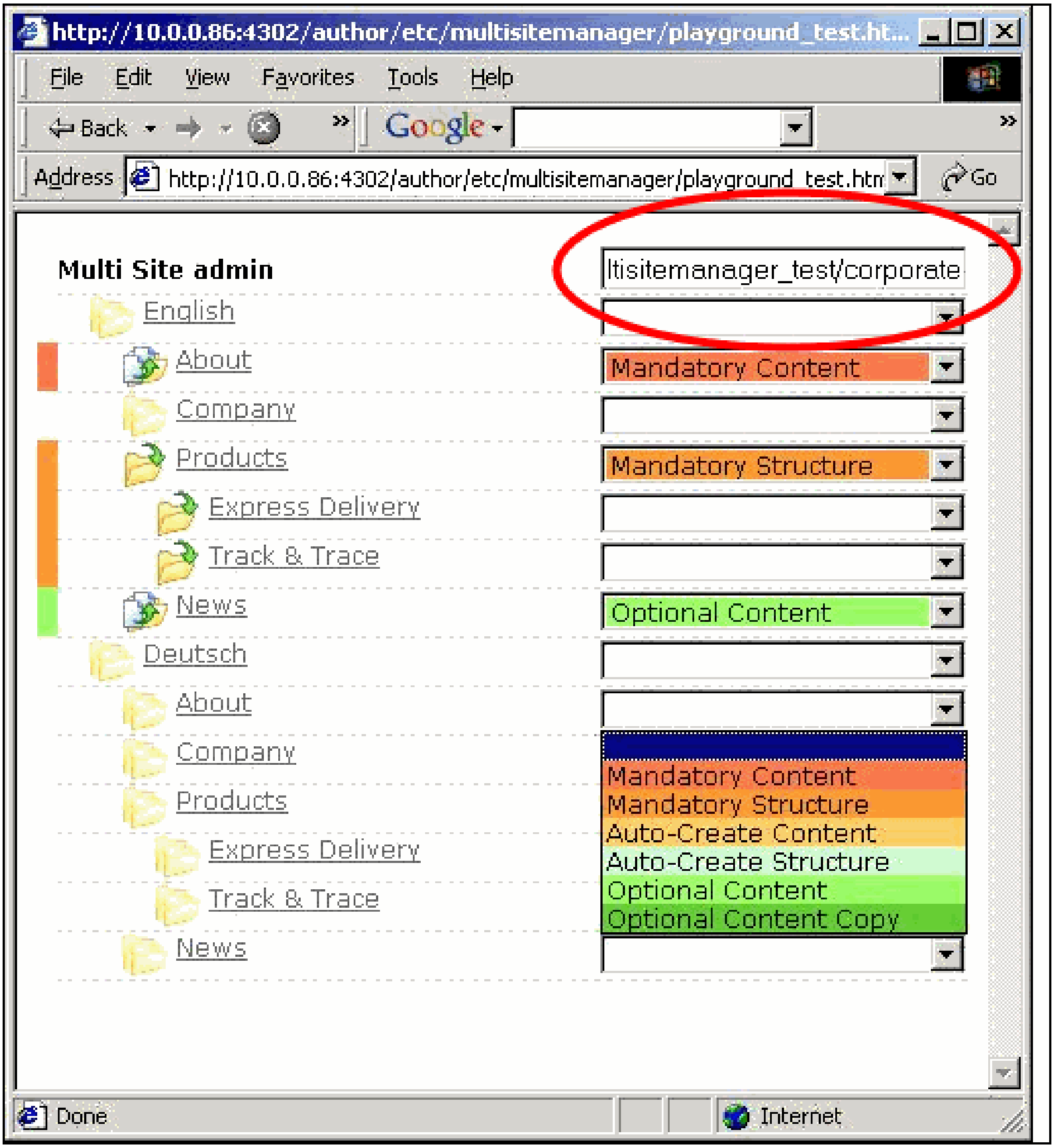
To do that the following steps are necessary:

- Navigate to the Multi-Site Manager Section in the `Miscellaneous` Tab in the Communiqué Main Console
- Hit the `New` Button
- Create a page with the `Multi-Site Manager Template`

Since this page is going to be the placeholder where you specify the constraints that apply to a set of sub-sites it should be named something like "country-constraints" or "dealer-constraints"

Modify a Multi-Site Manager Constraint Page

The constraints of a master site and its respective sub-sites are managed through a Multi-Site Manager Constraint Page. The way this page is set up has direct impact to all children pages.

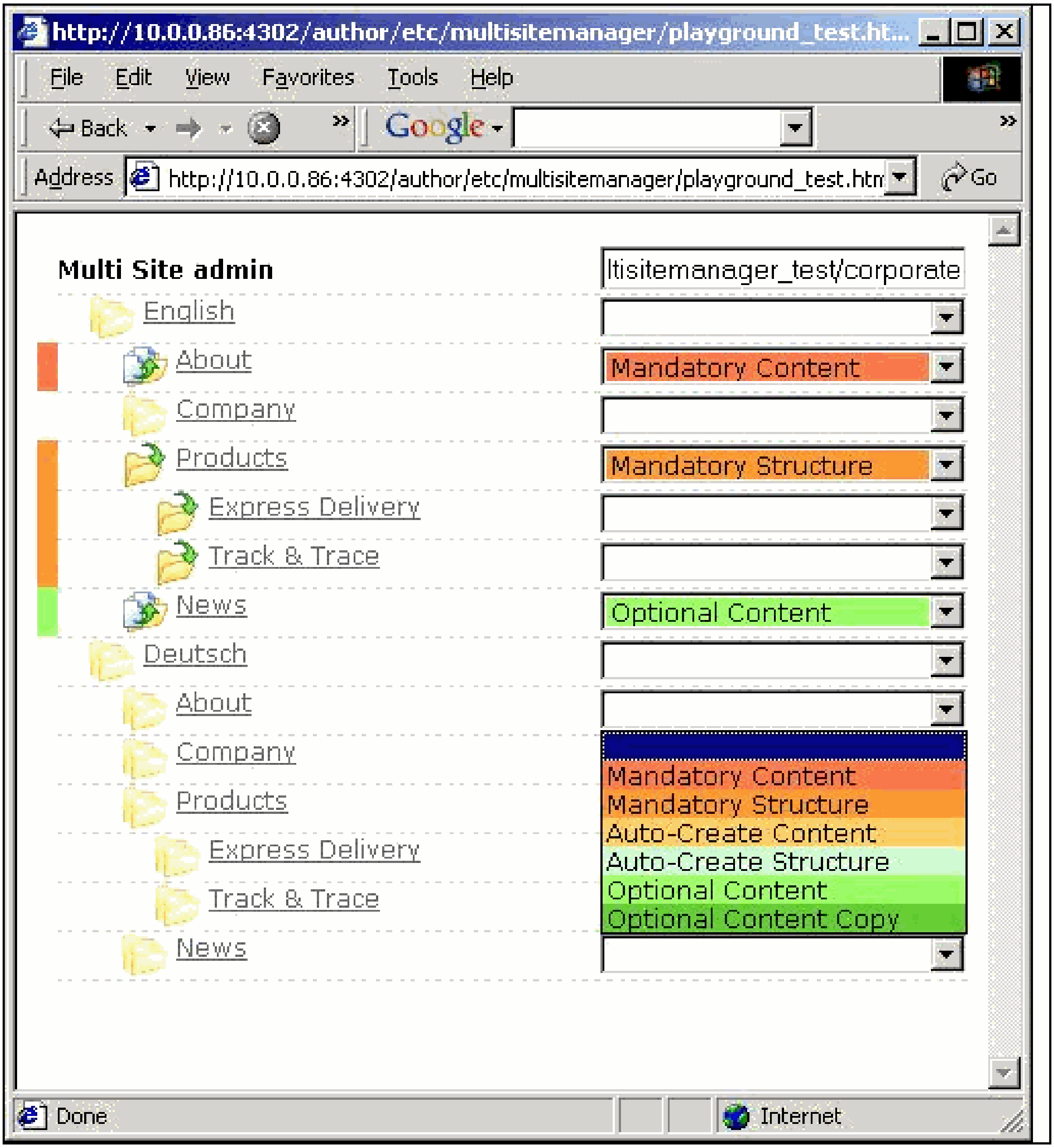


To start setting up a page, it is important to first specify the path to the respective master site. The

master site can be a "natural master" site (like a corporate site, which inherits content to subsidiary sites) or a "technical master" which is not visible to the general public and serves only as a point of reference to manage the content which is inherited to sub-sites.

Type in the source for your master site on the top-right of your Multi-Site Manager page.

After setting up the Multi-Site Manager page to point to the appropriate "master tree" you will be able to see the entire structure of the master tree and apply the various constraints.



	modify Content?	modify Structure?	Select with inherit button?	Is created automatically	Automatic Update
Mandatory Content	No	No	No	Yes	Yes
Mandatory Structure	Yes	No	No	Yes	Yes(*)
AutoCreate Content	Yes	Yes	No	Yes	Yes(*)
AutoCreate Structure	Yes	Yes	No	Yes	Yes(*)
Optional Content	No	No	Yes	No	Yes
Optional Content Copy	Yes	Yes	Yes	No	No

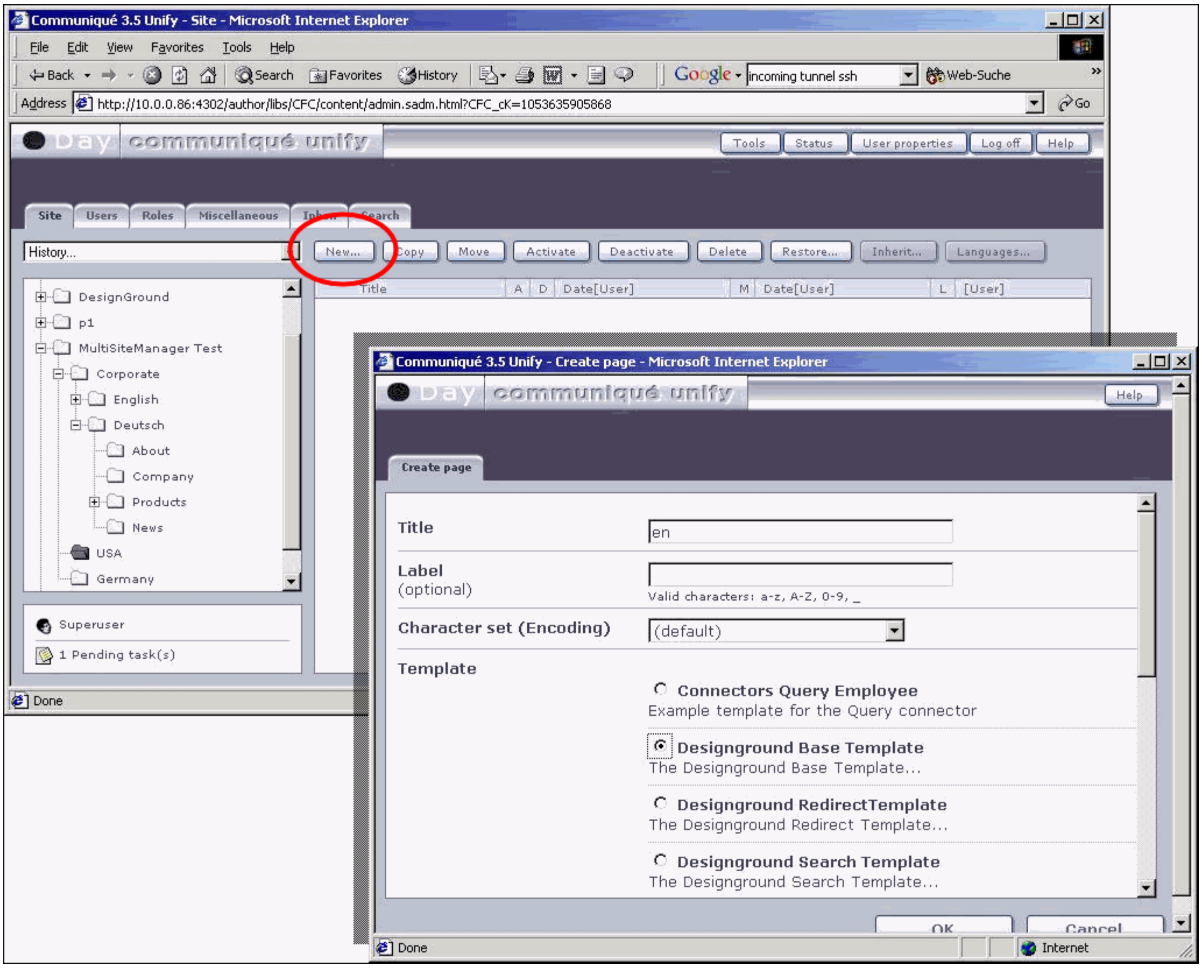
(*) Structural changes & additions only

1.3.6.4.3.2. Testing and Using Inheritance Constraints

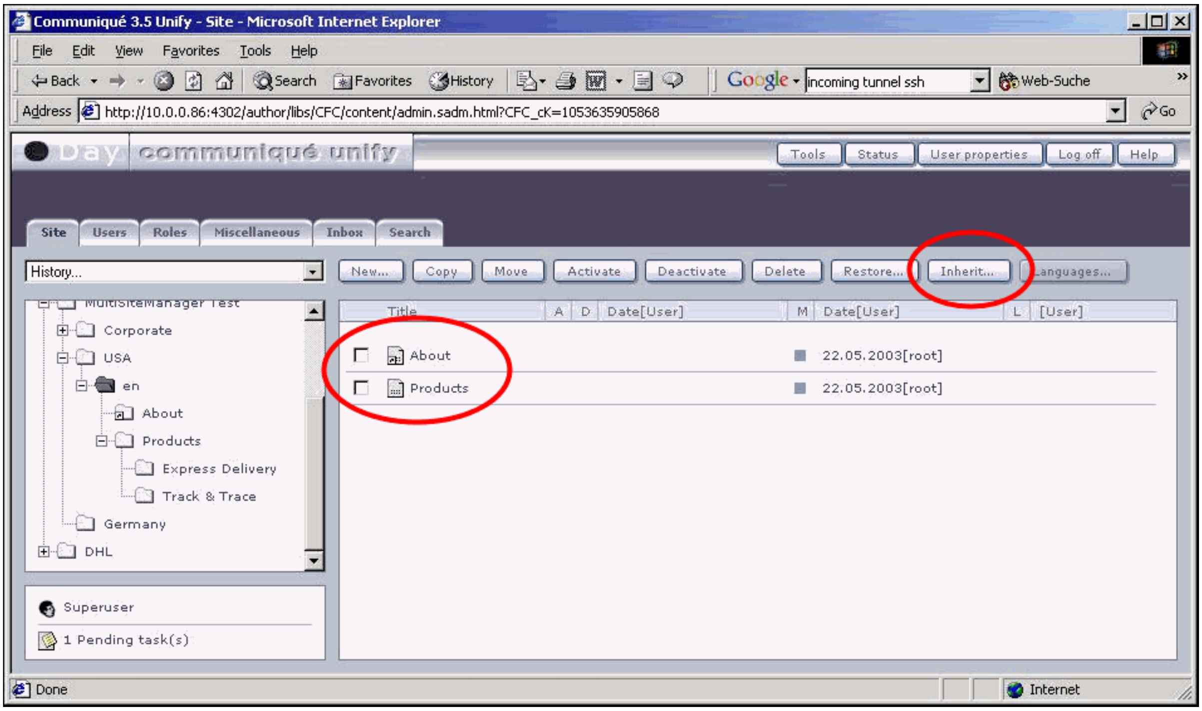
After setting up the constraints, the creation in a sub-site of a parent folder of a folder with a constraint, will trigger the actions defined in the master site.

So, for testing purposes it is advisable to go to a test sub-site and create the respective folders to see the actions.

For example: create a language tree in a sub-site to see the defined constraints.

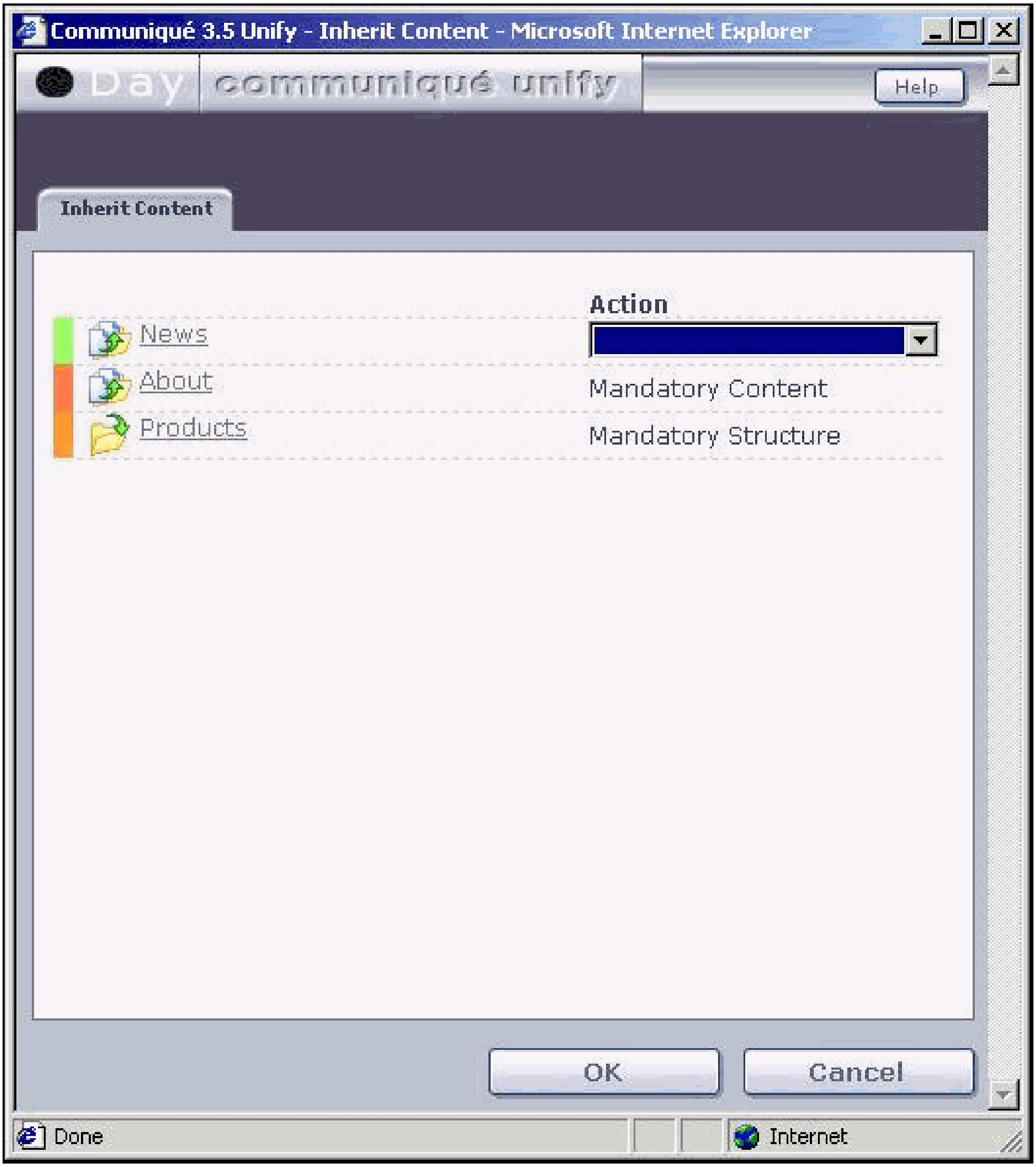


For the language, choose the respective 2-digit ISO language code.



After the creation of the language according to the respective MSM constraints, the "About" and the "Products" are created automatically.

Additionally the `Inherit` button appears and clicking it displays the following:



This will allow the owner of a sub-site to select the "optional" content to be either references or copied.

1.3.6.4.3.3. Language coherence

The Multi-Site Manager also comes with the ability to view how coherent (or in-sync) the various languages of any master or sub-site are.

Read the short documentation about the Language Manager for this.

1.3.6.5. Workflows

To create a new or updated content page it often takes a number of processing steps before the page can be replicated to a public server. The steps and responsibilities depend on how the content owners are organized.

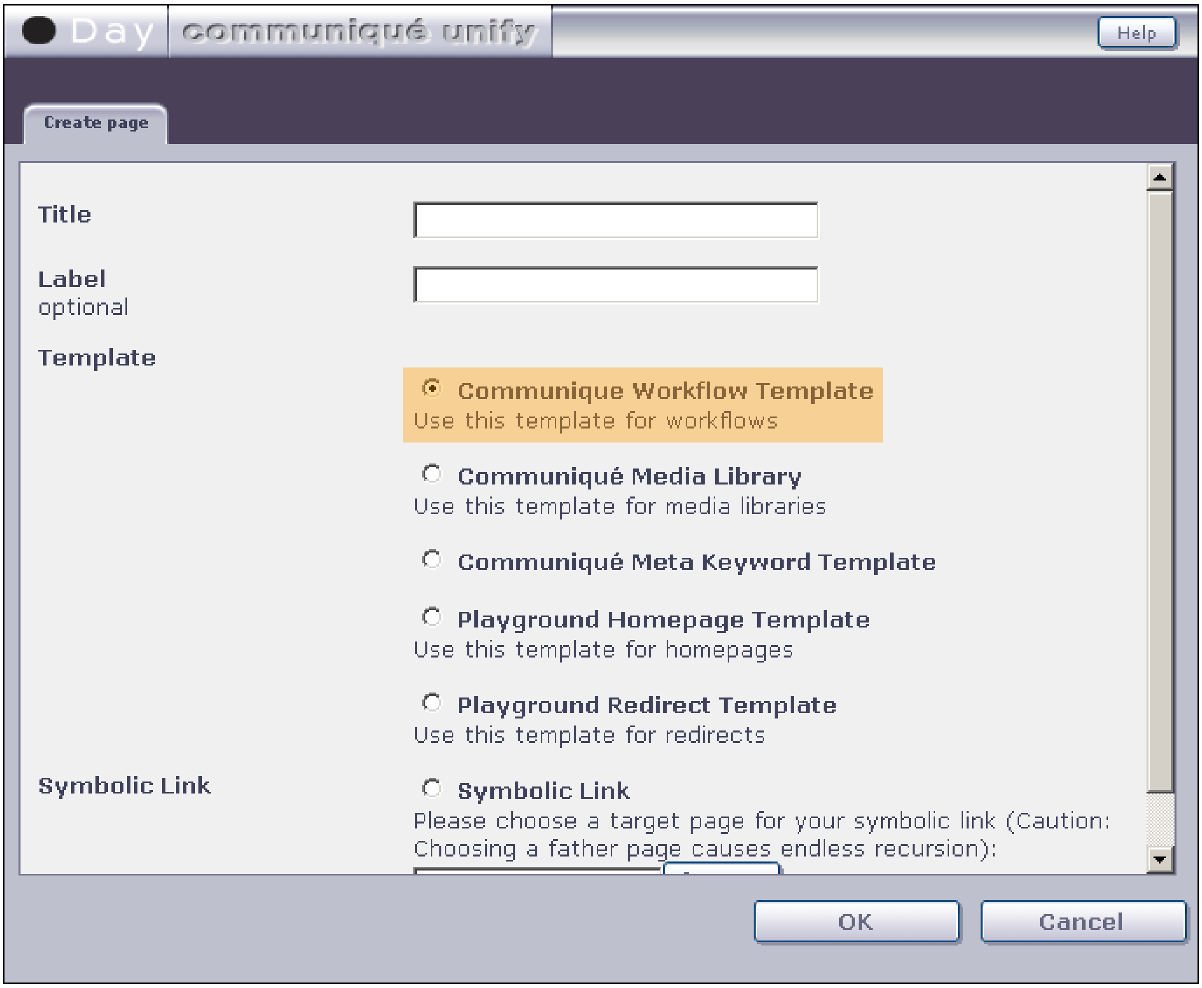
In the simplest case it can be one person doing everything in one step: creating or changing content, verifying it, and activating the page.

But more often in larger companies different people with different tasks contribute to the creation of a web page. For example, one author is responsible for the textual part and another one for creating the images. Still another person may be responsible for translation or checking the legal texts or price lists.

To map and visualize such a creation process in Communiqué you can use the **workflow** function, which is an integral part of the CMS.

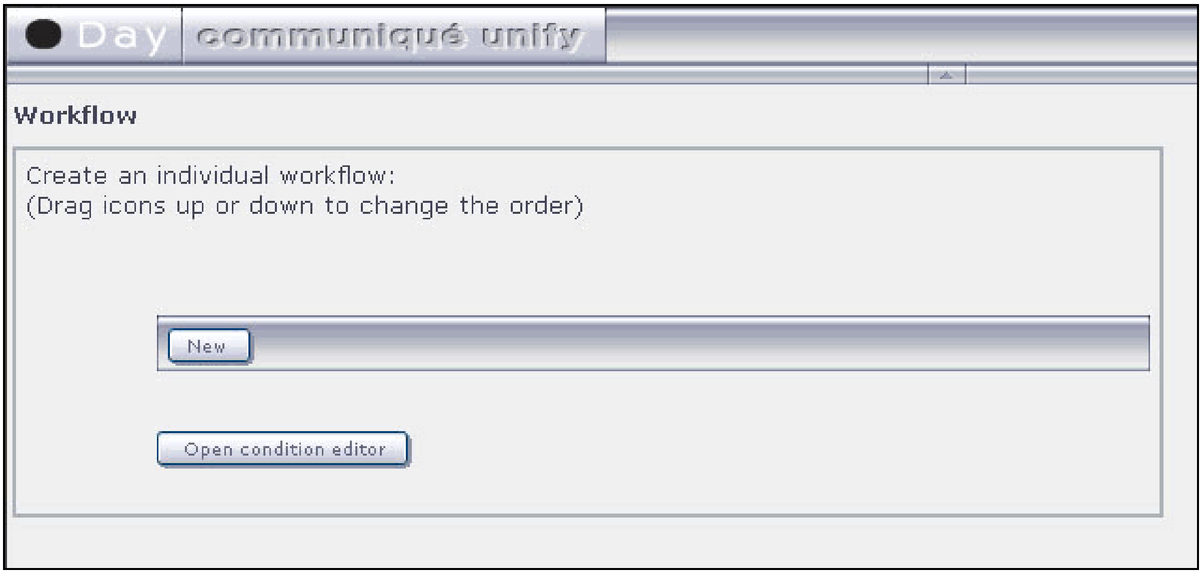
You can define any number of workflow processes and assign them later to content pages. See Using Workflows for more details about the workflow functionalities.

To add a new workflow process you simply create a new page in **`/etc/workflows`** section using the **workflow template**:

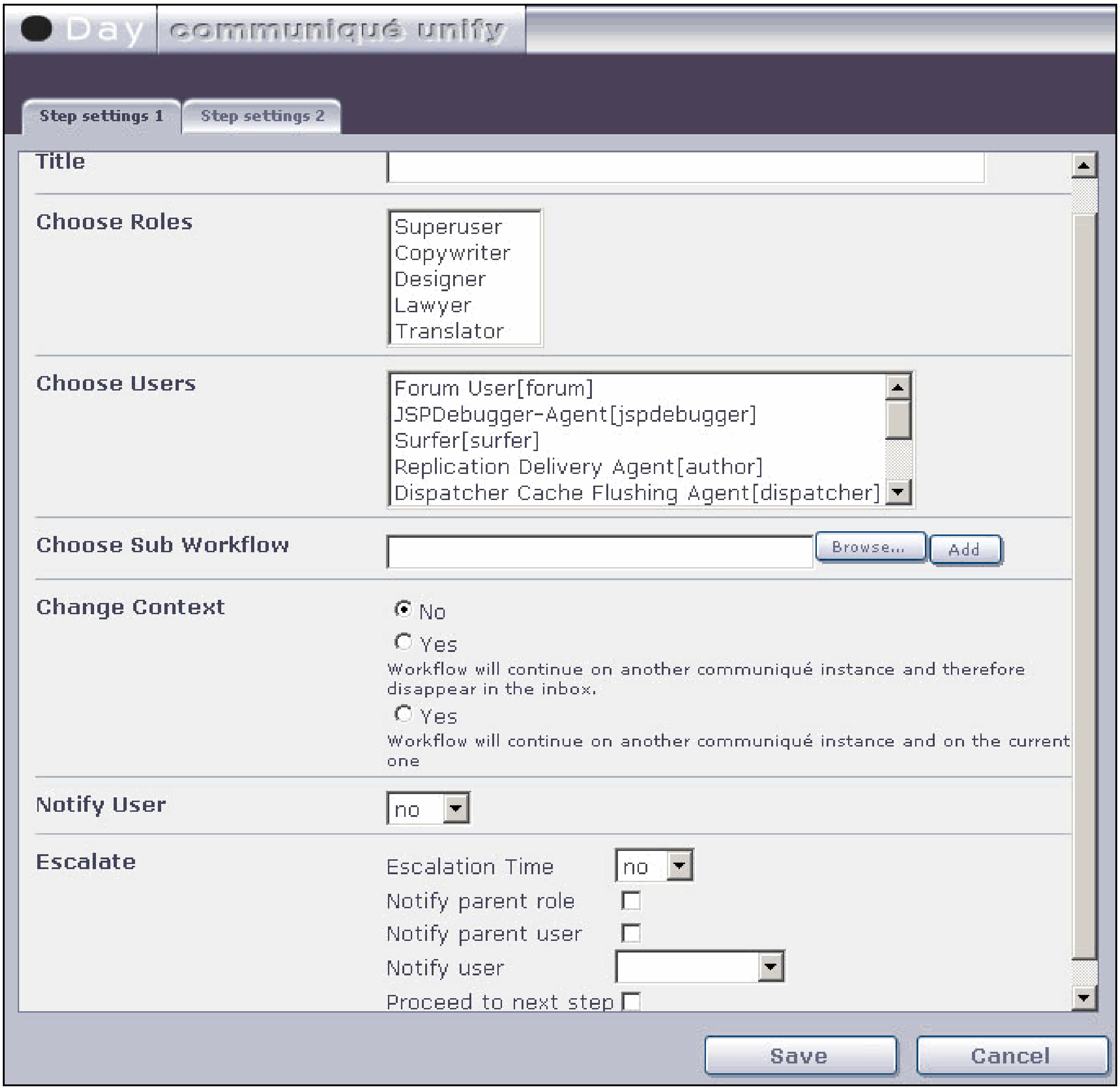


The title you enter for the page will appear in the drop down list of selectable workflow process definitions when starting a new workflow process.

When you open the newly created workflow page you will see the following:



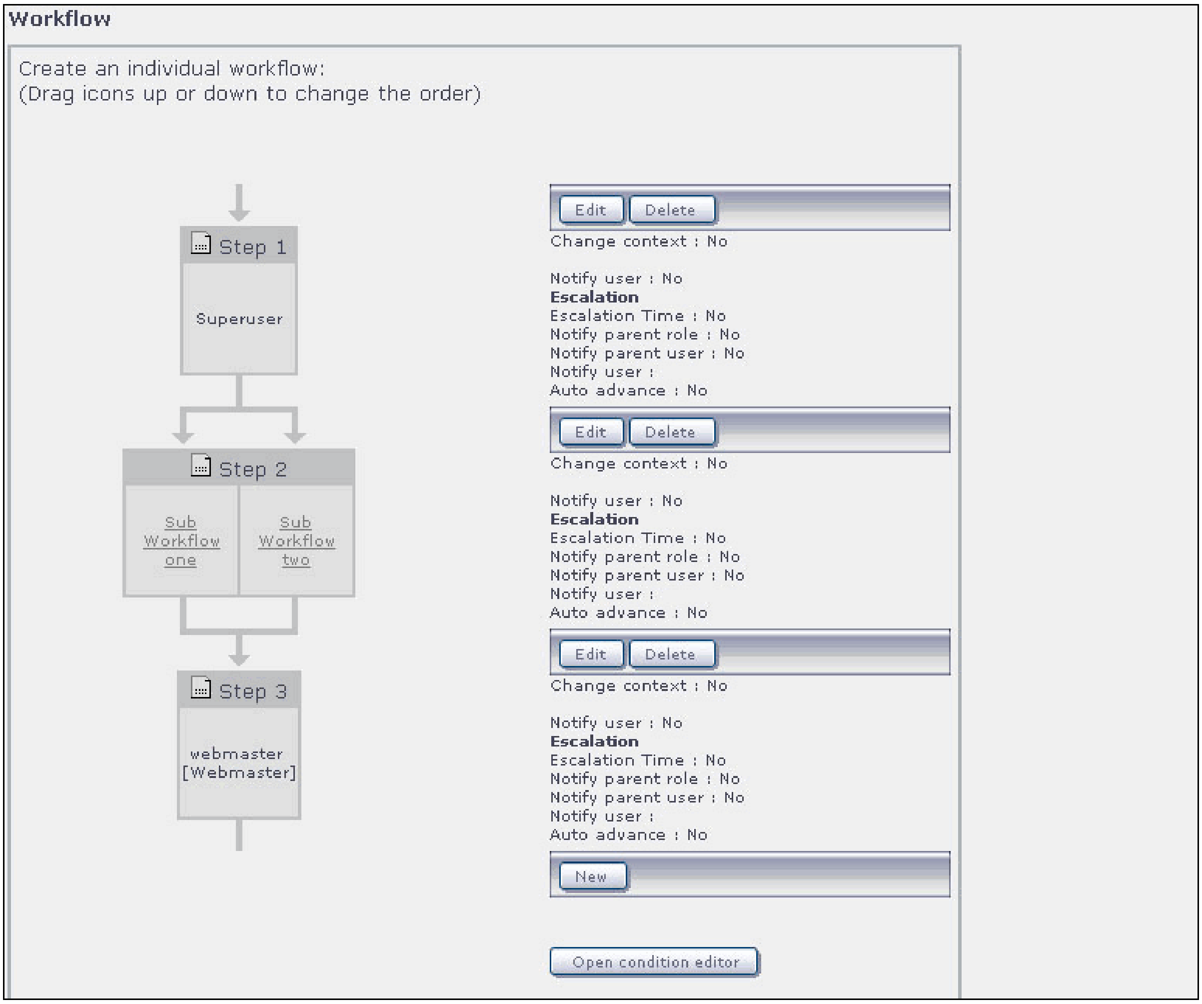
Clicking on the **New** button will open the following dialog where you can define a specific workflow step:



Input Field	Description
Title	A **descriptive title** for the current workflow step. This text will be shown in the graphical overview.
Choose Roles	You can assign **one or more** roles to this workflow step To select more then one role : - Click first role, press `SHIFT` and click on the last role. This will select all roles in-between. - Press `ALT` and select all roles from the list you wish to add.
Choose Users	You can assign **one or more** users to this workflow step. The list shows

	the users full name, if defined, and the User-ID. To select more then one user: - Click the first user, press SHIFT and click on the last user. This will select all users in between. - Press ALT and select all users from the list you wish to add.
Change Context	If set to **yes**, the next workflow step is located on a **different Communiqué 3 Instance**. See the remarks in the Parallel Workflow section about changing context.
Choose Sub Workflow	You can use the `browse` button to open content browser. Navigate through this tree and select a workflow page. After choosing the workflow click on the `Add` button.
Notify User	Defines the **timelimit** after which all users who still have the workflow package in their inbox get a reminder mail. See the remarks in the Parallel Workflow section about mail notifications.
Escalation Time	Defines the **time limit for this workflow step**.
Notify parent role	If selected an **escalation mail is sent to the parent role(s)** of the assigned roles. See the remarks in the Parallel Workflow section about mail notifications.
Notify parent user	If selected an **escalation mail is sent to the parent users** of the assigned users. See the remarks in the Parallel Workflow section about mail notifications.
Notify user	If defined an **escalation mail is sent to the defined user**. See the remarks in the Parallel Workflow section about mail notifications
Proceed to next step	If escalation time is reached to workflow package is automatically promoted to the next step.

After adding all your workflow steps you will see the following information:



Multiple Workflow Step Participants

If you assigned multiple roles and/or users to one workflow step, the workflow package appears in the inbox of the workflow participants that have been assigned for the next step **only** if all users of the current step have promoted the workflow package.

If you assigned multiple roles and/or users to one workflow step and **one** of them sends the workflow package backwards it will be instantly removed from all other users inbox and appear in the previous step.

Changing Context

If you define that the next step should be located on a different Communiqué instance, all pages that are part of the workflow package get replicated to connected subscribers.

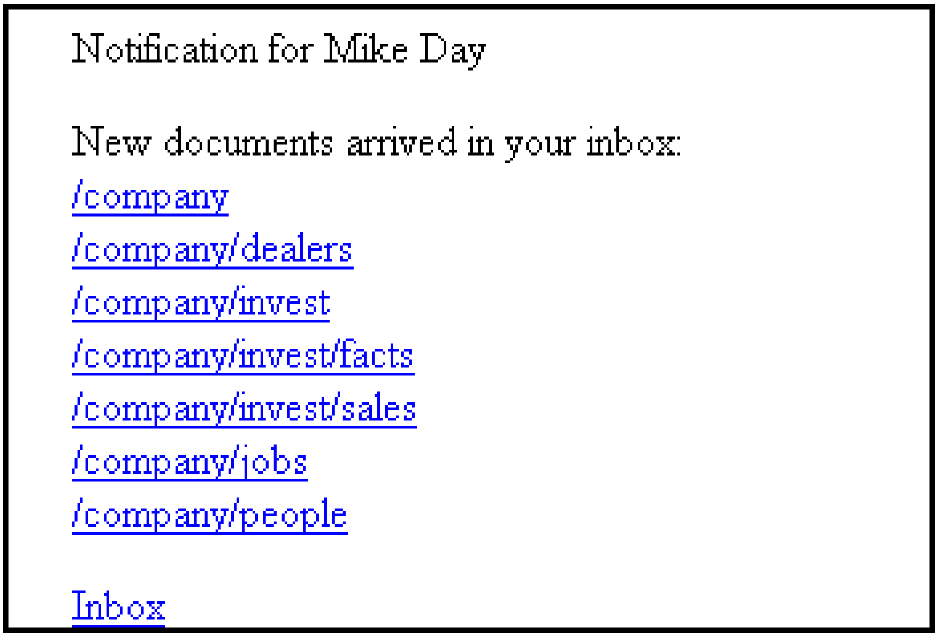
The workflow page must also exist on the receiving instance!

Otherwise the workflow process will be lost. The best way to ensure the existence of the workflow page on the receiver is to define the process on the first instance and replicate it to all following instances before starting to use it.

You can't go back to a workflow step that is located on a different instance! Replicating pages to different instances can only be executed in the forward direction.

Escalation and Notification Mails

A notification mail looks like this:


Notification for Mike Day

New documents arrived in your inbox:
/company
/company/dealers
/company/invest
/company/invest/facts
/company/invest/sales
/company/jobs
/company/people

Inbox

An escalation mail looks like this:

The mails will be sent in the author's language. The inbox link at the bottom of the points to the inbox page of the CMS that sent this mail.

You can use the VersionWarp in the Page Properties of the workflow page to get previous version of the page.

1.4. Using Workflows

The creation or updating of web content often involves a number of stages. The particular steps involved depend on how ownership and responsibility for content is organized.

The simplest case is one person doing everything, for example: creating or changing content, verifying it and activating the page.

More commonly, especially in larger organizations, different people with different areas of competence share responsibility the creation and publishing of a web page. For example, one author might be responsible for writing the text and another one for creating the proper images. Yet another person may be responsible for translation or checking the legal texts or price lists, and so forth.

To map and visualize such a creation process in Communiqué you can use the **workflow** function, which is an integral part of the CMS.

Workflow Functionalities

- **Predefined** and **individual** workflows.
- A workflow can contain **any number of steps**.
- A workflow can be assigned to **one page** or a whole **content tree**.
- Assigning a **user** to a workflow step.
- Parallel Workflow: One workflow step can have **multiple users/roles** assigned.
- Workflow participants get **notifications in Communiqué's inbox**.
- **Mail notification for workflow participants** when there are new entries in inbox.
- Workflow participants can **attach files** and **add comments** to a page in the workflow process.
- A workflow package can be **sent back any number of steps** in the process.
- **Graphical overview of current status and history** of a workflow process.
- Definition of **escalation procedures** if the time limit for a workflow step is exceeded.
- **Context Change**: A workflow process can span over several Communiqué instances.
- **Automatic assignment of a workflow process** to newly created pages.

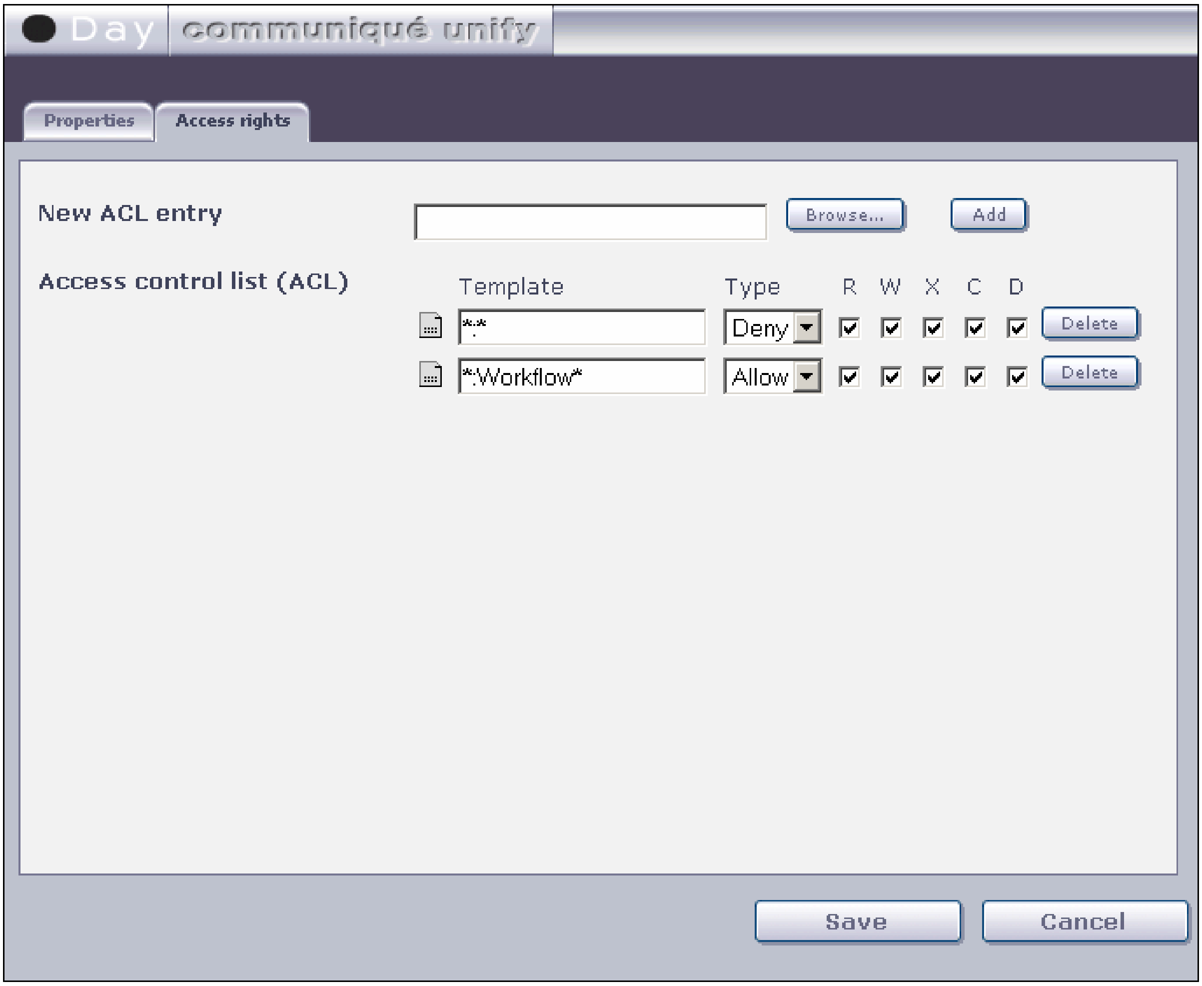
User / Page Access Rights

If a content page is part of a workflow process, all workflow related information is stored as content inside the page. Therefore, if an author is to participate in a workflow process he must at least have read/write rights to the page(s) in the workflow package.

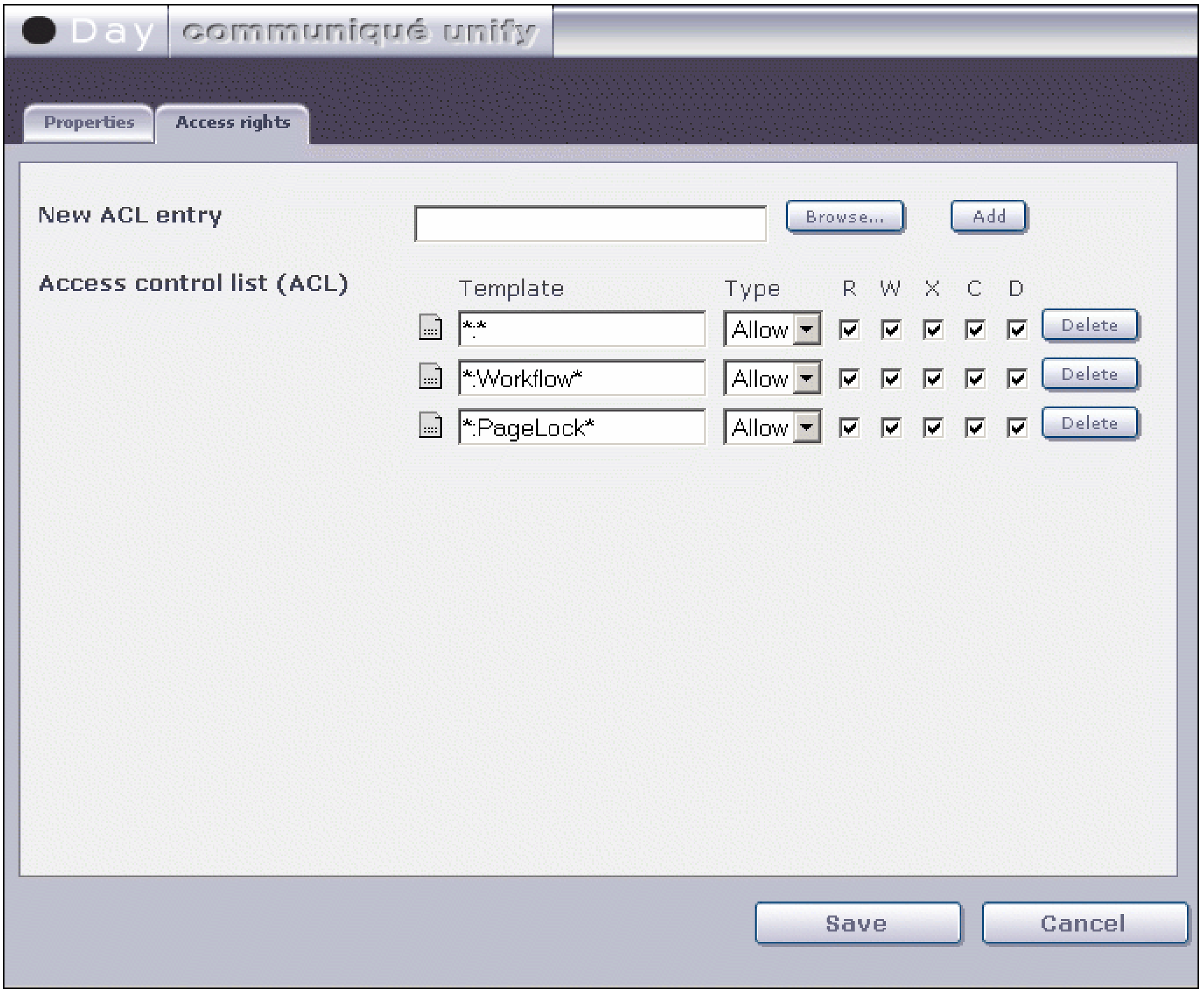
Role / Content Rights

If you want to restrict the write rights of an author to the content atoms that are related to the workflow process you assign a role to the author that restricts his content access rights.

To add a role that has only read permissions for the content of any page except for the workflow atoms you must define the following entries in the Access Control List (ACL) of the role in question:



If the role owner should additionally be able to lock, **unlock** or **break the lock** of the page, an additional ACL Entry is needed:



Using Workflows

- Creating a new Workflow Definition
- Starting a Workflow
  - Manually Starting a Workflow Process
  - Automatically Starting a Workflow Process
- Editing Pages in Workflow
- Checking Workflow Progress
- Inbox
  - Workflow Actions
- True parallel Workflows
- Automatic Advance
- Script Execution as Workflow Step

- Conditional Workfows
  - Conditional Jumps
  - Parallel Steps Selection
- Conditional Workflow Selection
- Examples
  - Parallel Workflow
  - Conditional Workflow
- Using Forms Within Worfkflow Steps
  - Simple Forms Binding
  - Application-Specific Forms Binding
  - Pre and Post Methods
  - Workflow Conditions
  - Example Application

Please note that the workflow content relies on a working and indexing search

1.4.1. Creating a new Workflow Definition

Workflow processes are defined using workflow templates provided by the CMS.

1.4.2. Starting a Workflow

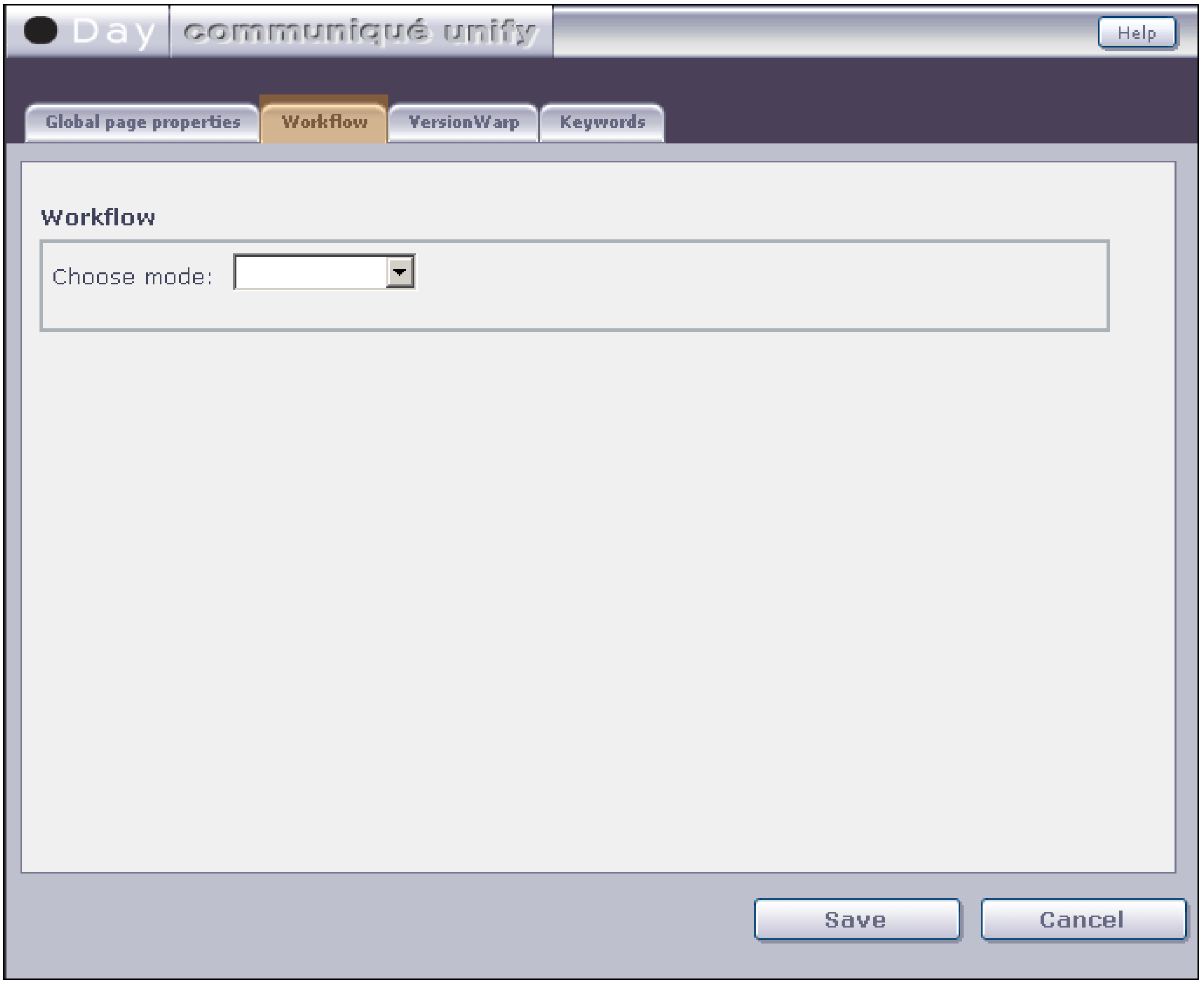
There are two ways to start a workflow process:

- Manually, by assigning a workflow to a page or a content tree branch in the Page Properties dialog of the (root) content page.
- Automatically, by defining a workflow process where the label matches with the name of a template.

1.4.2.1. Manually Starting a Workflow Process

A workflow process is started **manually** by assigning a workflow process to a page in its **Page Properties** dialog:

The dialog that opens contains a tab page named **`Workflow`**:



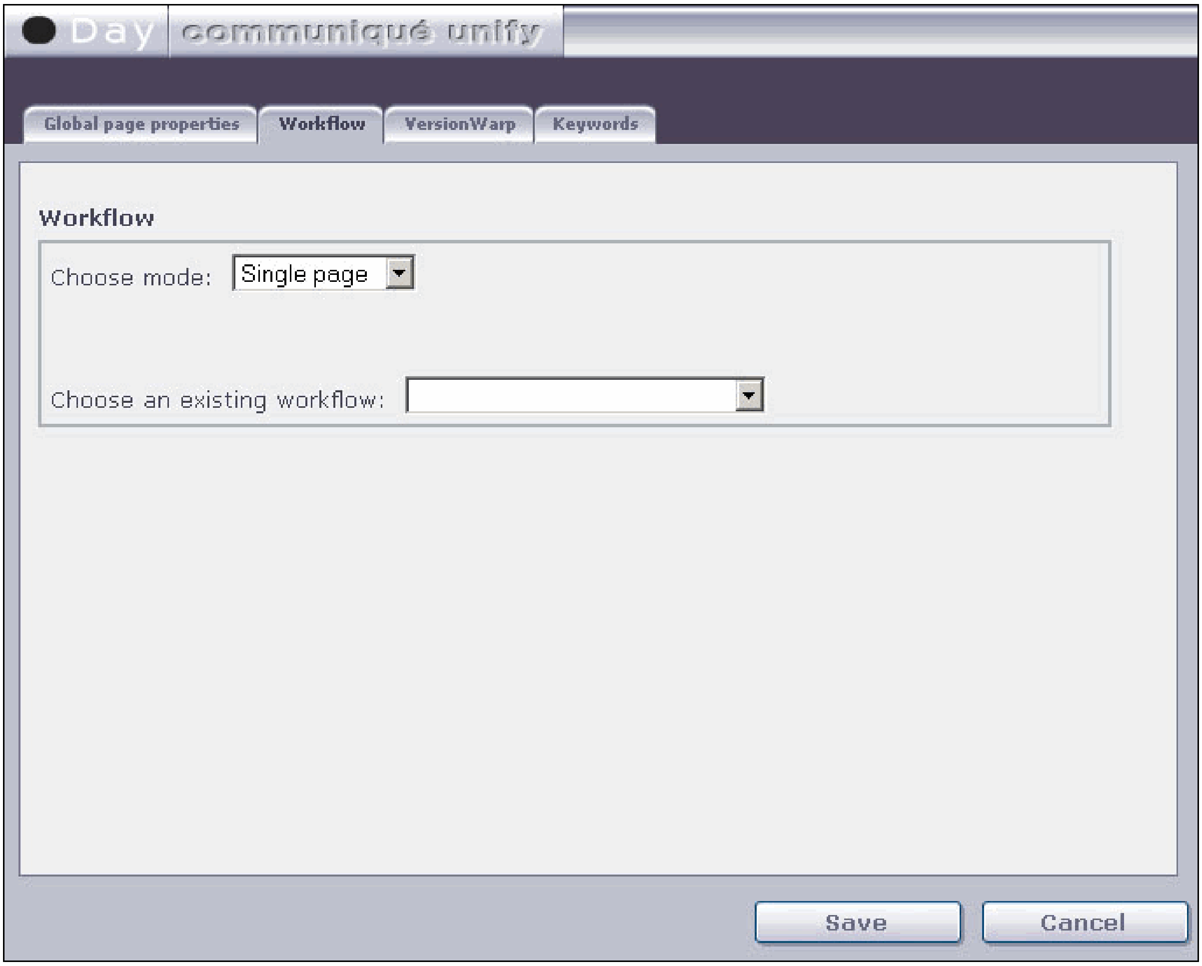
This tab page may not be available in all templates as it may be added or removed by the template developer.

Please note that when you assign a workflow process the dialog needs to reload to update the dialog output. All other form inputs made on other tabs get lost in that case.

Its recommended to either only assign the workflow process or to save the changes before assigning a workflow process.

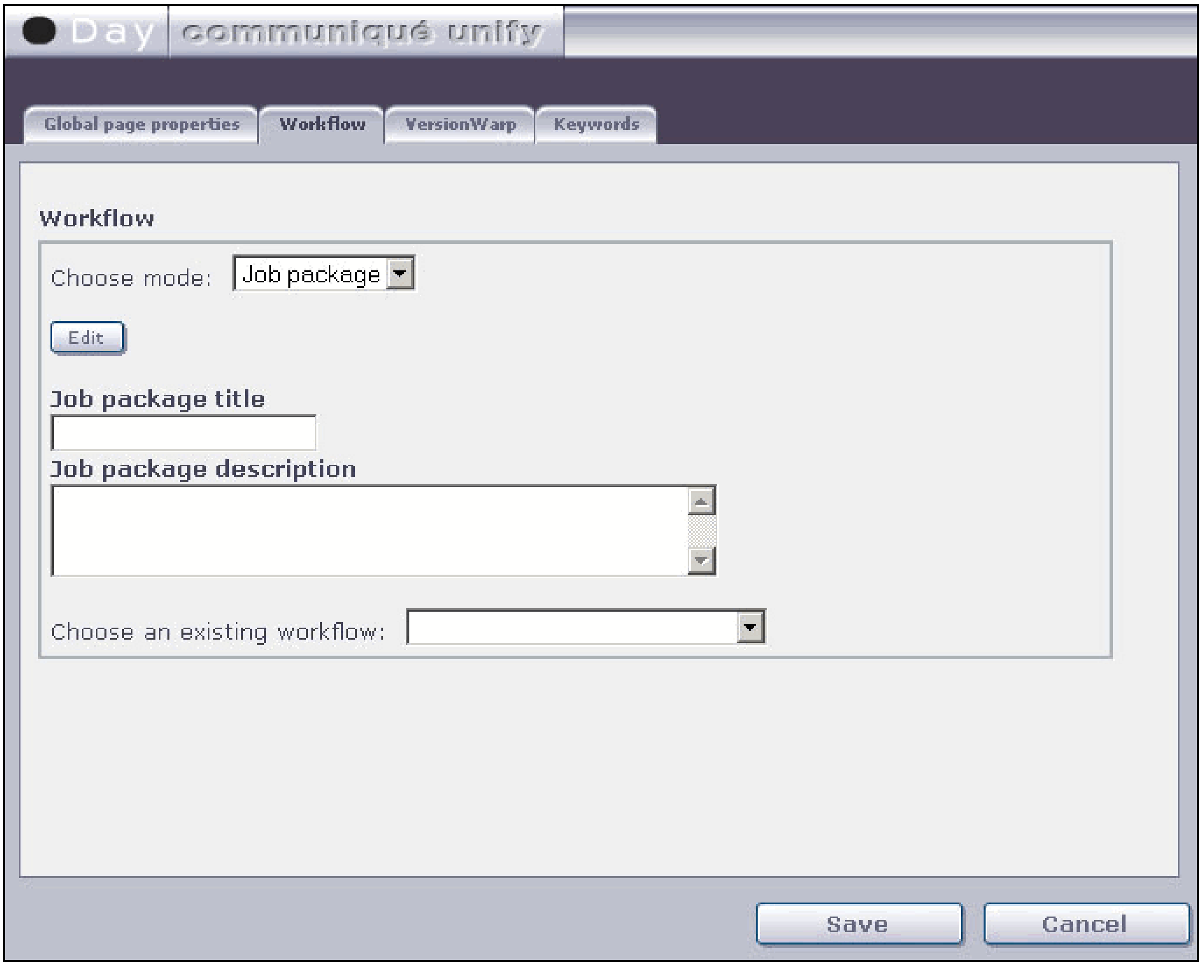
Adding Pages to the Workflow

In the first step you must define whether you want to add only the **current content page** to the workflow process or the **current page and all its children**.

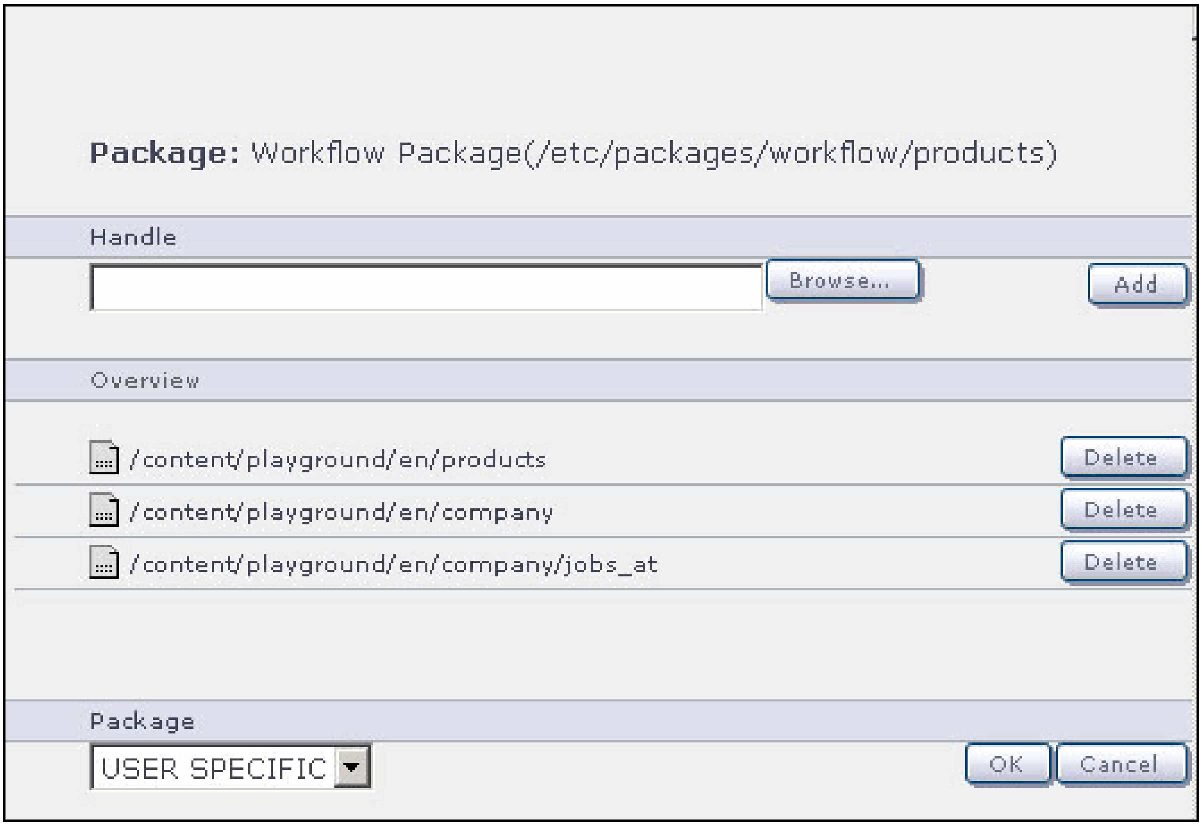


Add a **Job package title** that will be shown in the inbox of the various workflow participants. Additionally you can add a short description of the package if needed.

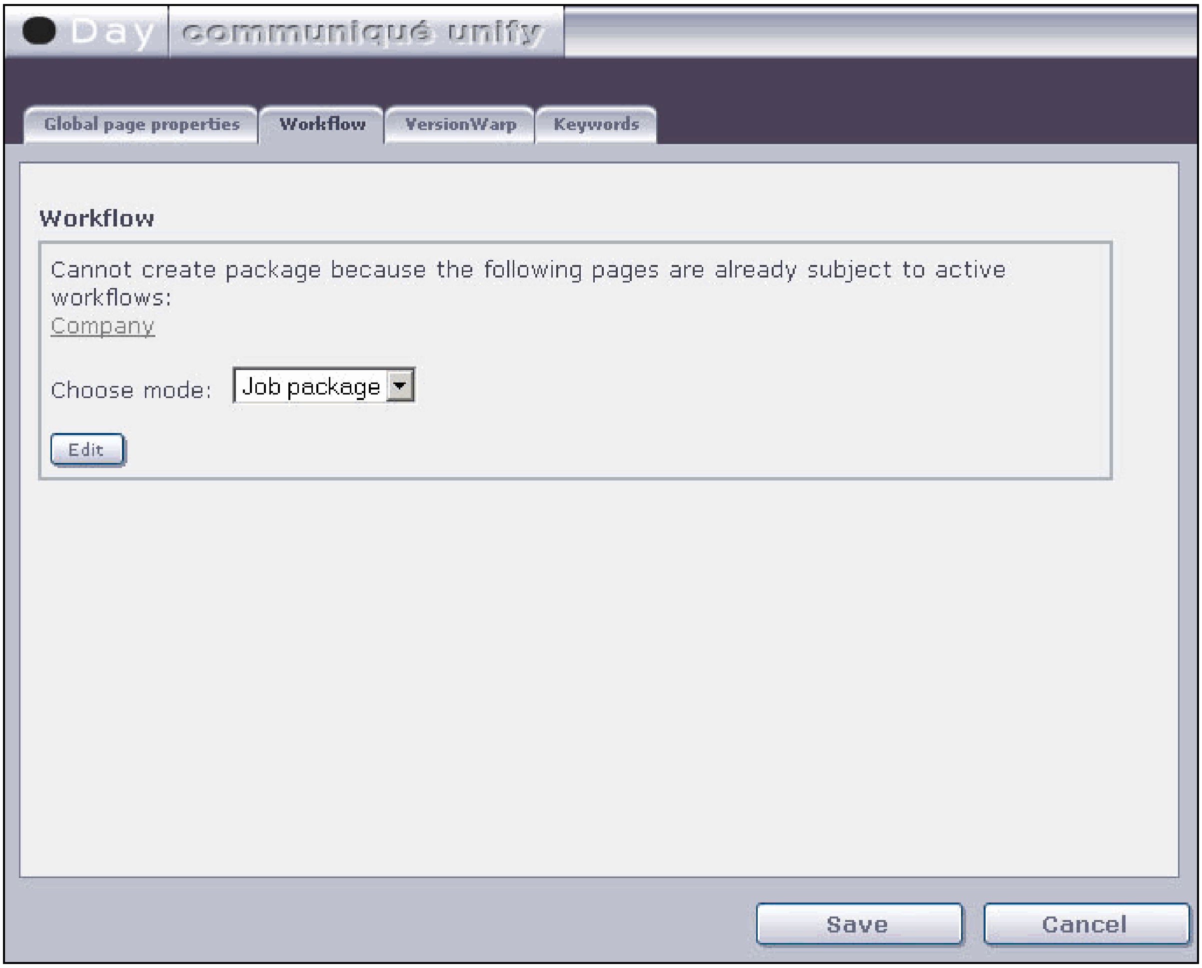
Click on the **`edit`** button to select the pages of the **Job Package.**



Click on the **browse** button and navigate to the desired page. Putting ***** at the end of the handle will include all subpages. Add the page to the list. Save the package using the **ok** button:

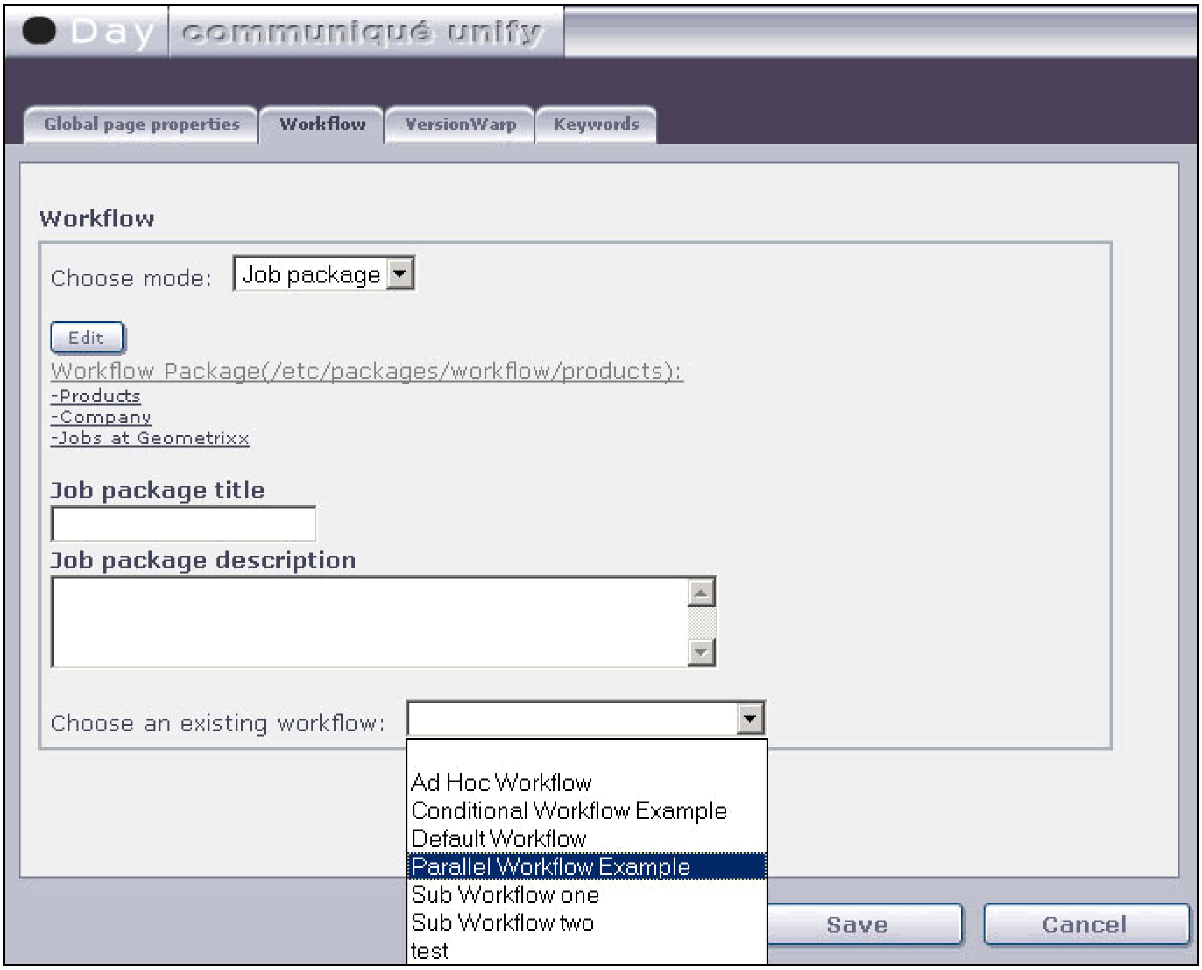


If any of the pages that are to be added are already part of another workflow process you will get an error message:



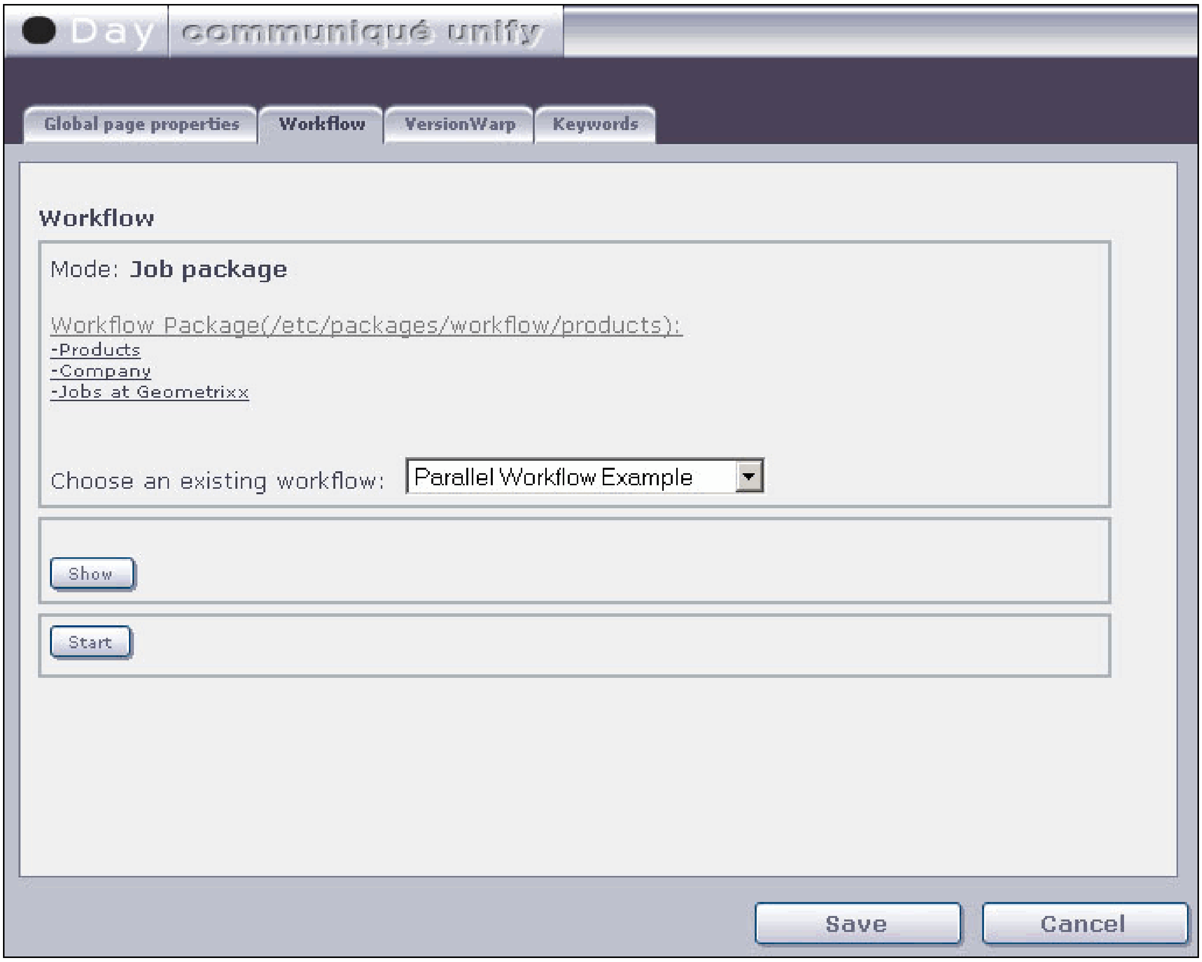
Selecting the Workflow Process

The drop down list at the bottom shows the title texts of all defined workflow process pages:

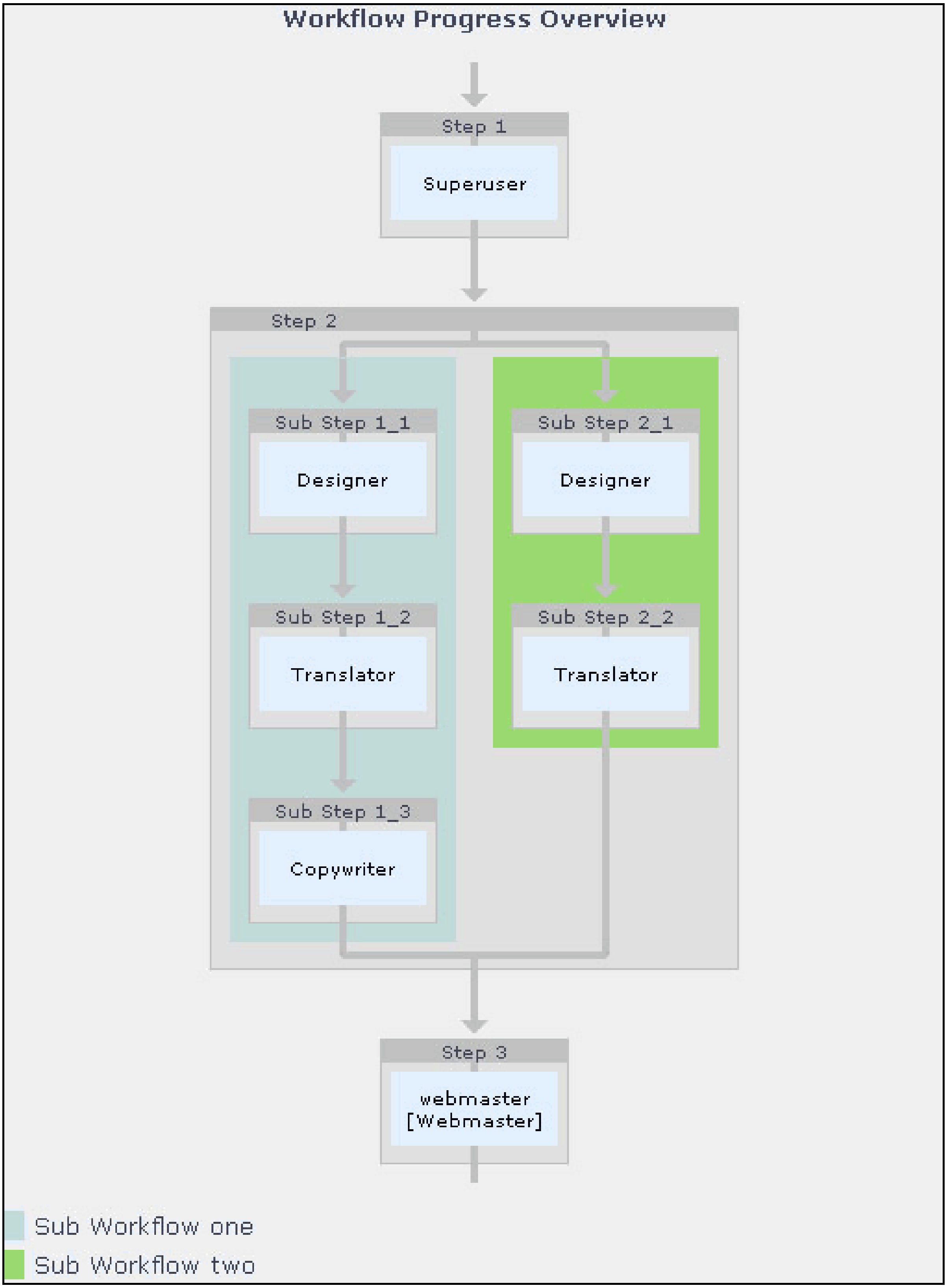


There is always one special entry in the drop down list named **`Ad Hoc WORKFLOW`**. Selecting this item allows you to define an **individual workflow process** for the selected page(s). In that case, the interface that appears at the bottom of the dialog is the same as the one for defining a predefined workflow using the Workflow Template.

If you select one of the **predefined workflow processes**, its definition is shown below. It is presented in the same way as it is in the Workflow template except that you can't edit the process.

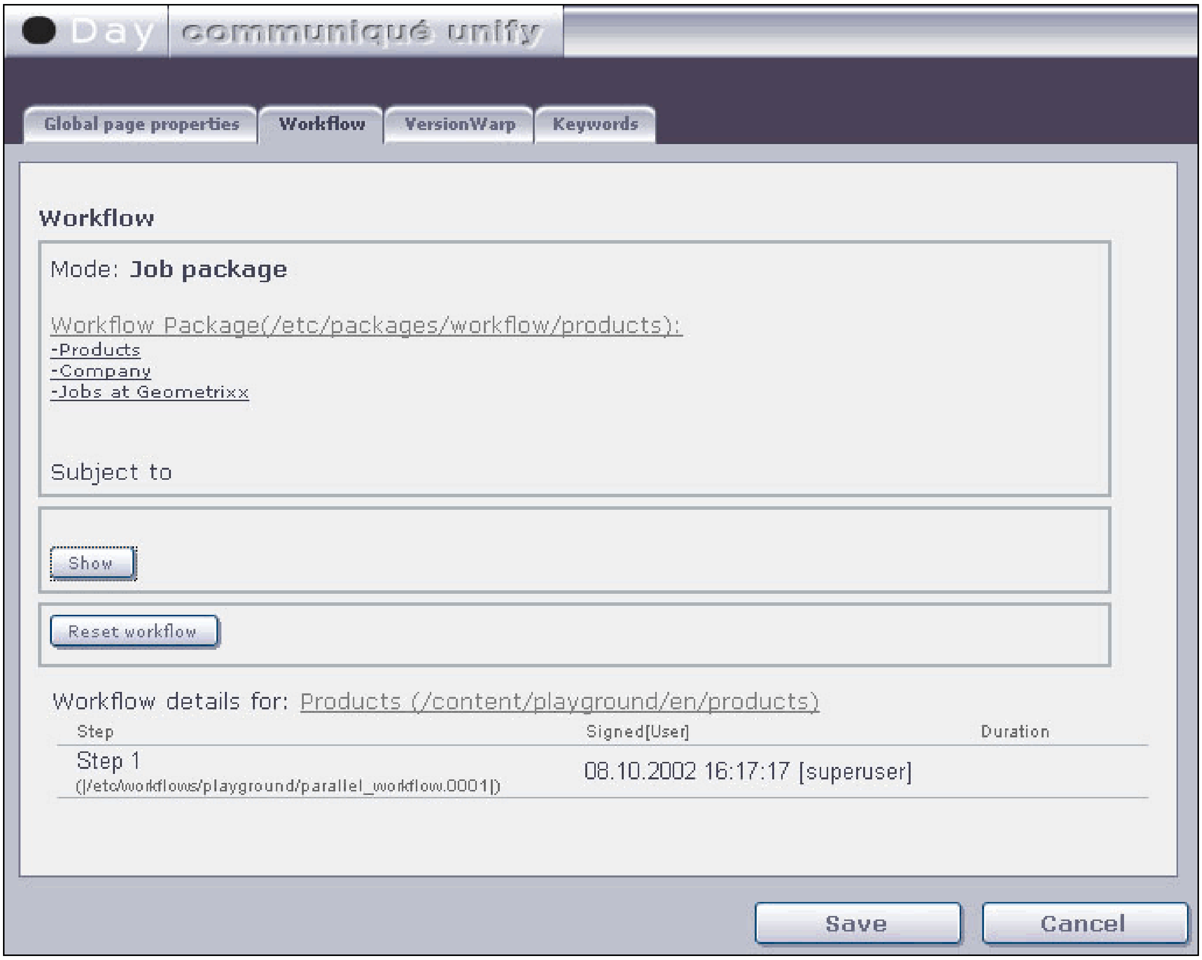


Clicking the **Show** button will show an overview of the selected workflow:



Clicking on the **`start`** button starts the process and adds the workflow process history graph at the

bottom:



The **`Reset Workflow`** button above the history graph is only available for the **Superuser**.

> The **`Reset Workflow`** button only removes the **current page** from the workflow process. If there are multiple pages in the workflow package they are still handled as **one job package** even if you remove the root page of the page tree.

1.4.2.2. Automatically Starting a Workflow Process

The **automatic** assignment of pages to workflows is **template-based** and occurs when a page is newly created.

The matching process works as follows:

- When a new page is being created, Communiqué tries to locate a workflow page where the **label of the workflow page is the same as the name of the template** that has been used to create the new page.
- If such a workflow process page exists it's automatically assigned to the new page. If the matching and assignment was successful your new page will show the workflow symbol in the site tree:

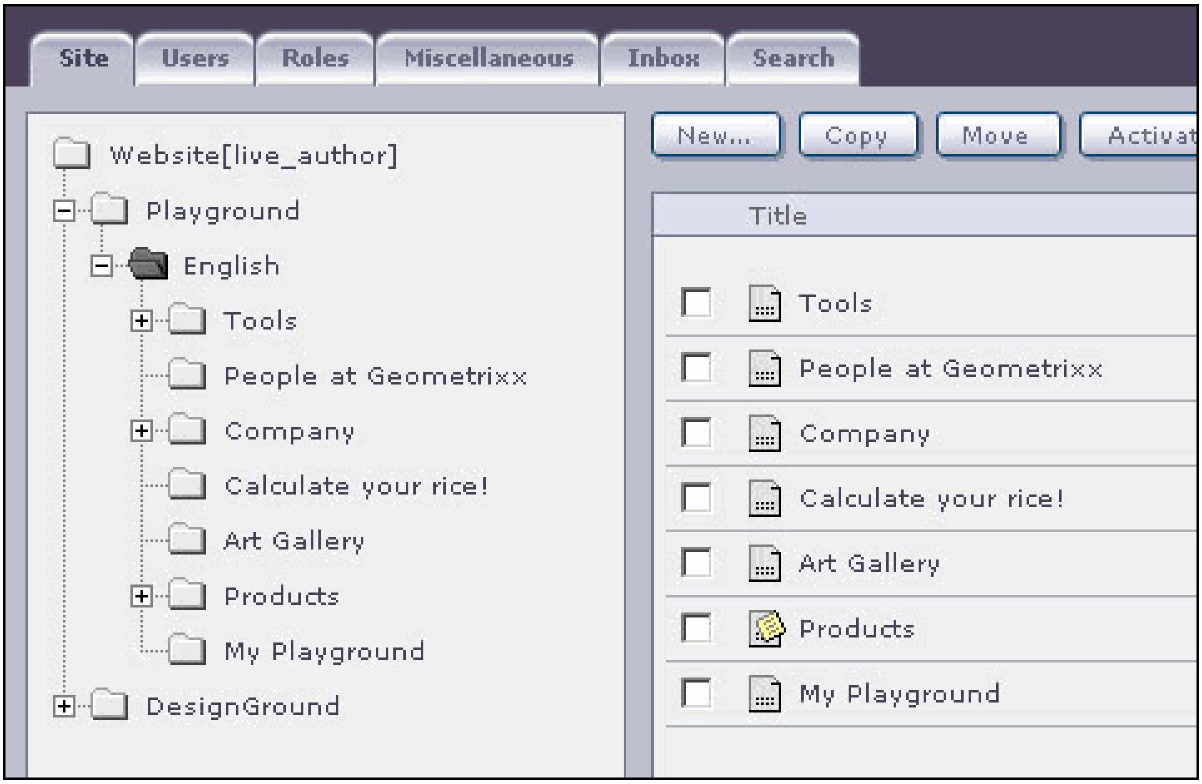
Because this automatic assignment happens when creating a new page, the workflow package always contains only this one page.

1.4.3. Editing Pages in Workflow

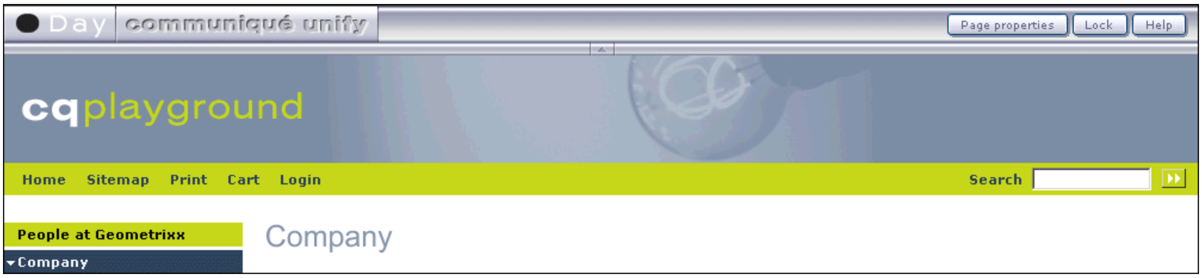
If a content page is in an active workflow only the users who are assigned to the current workflow step can edit the page. All other users get a view on the page without the edit controls.

1.4.4. Checking Workflow Progress

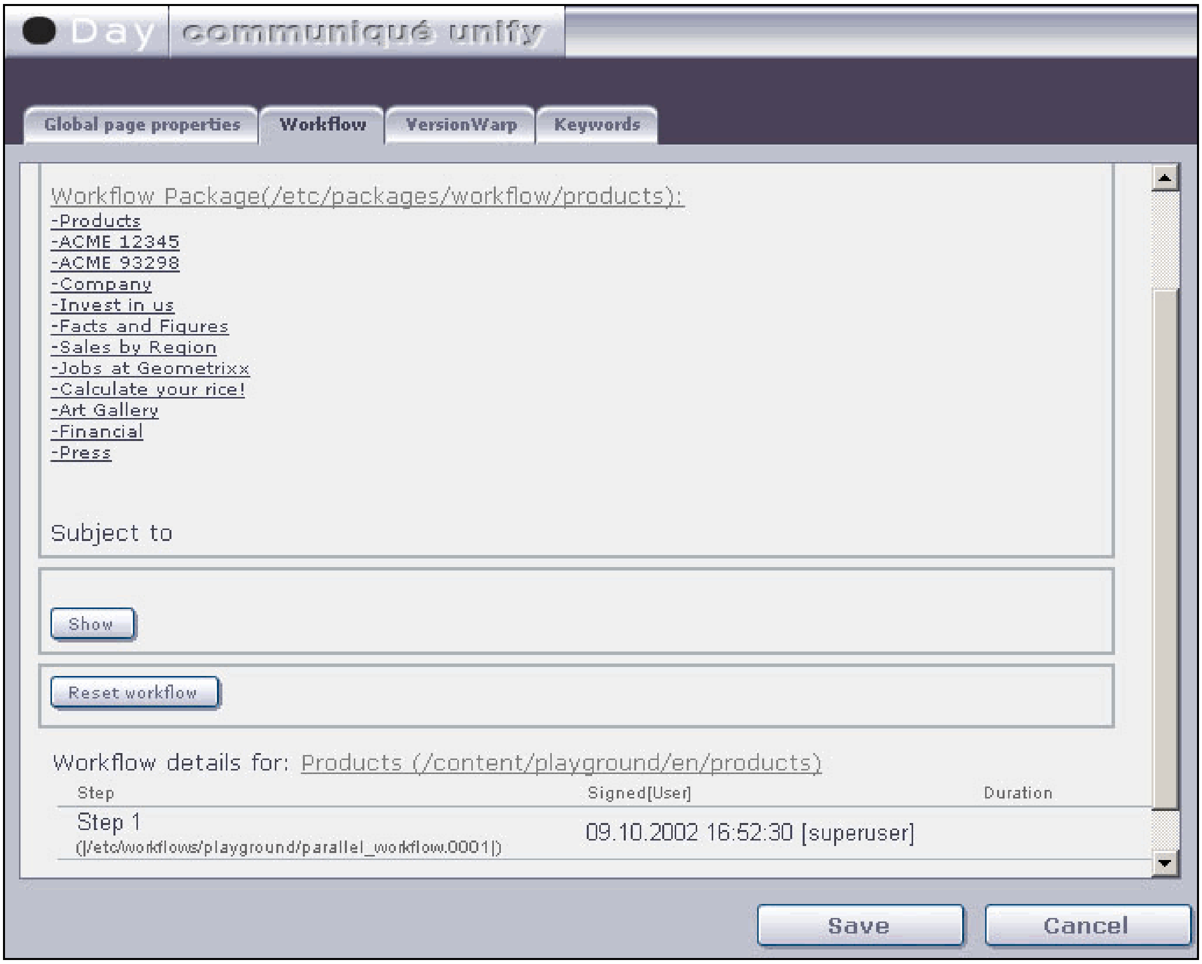
All pages that participate in a workflow process are visually marked in the site view by a special symbol:



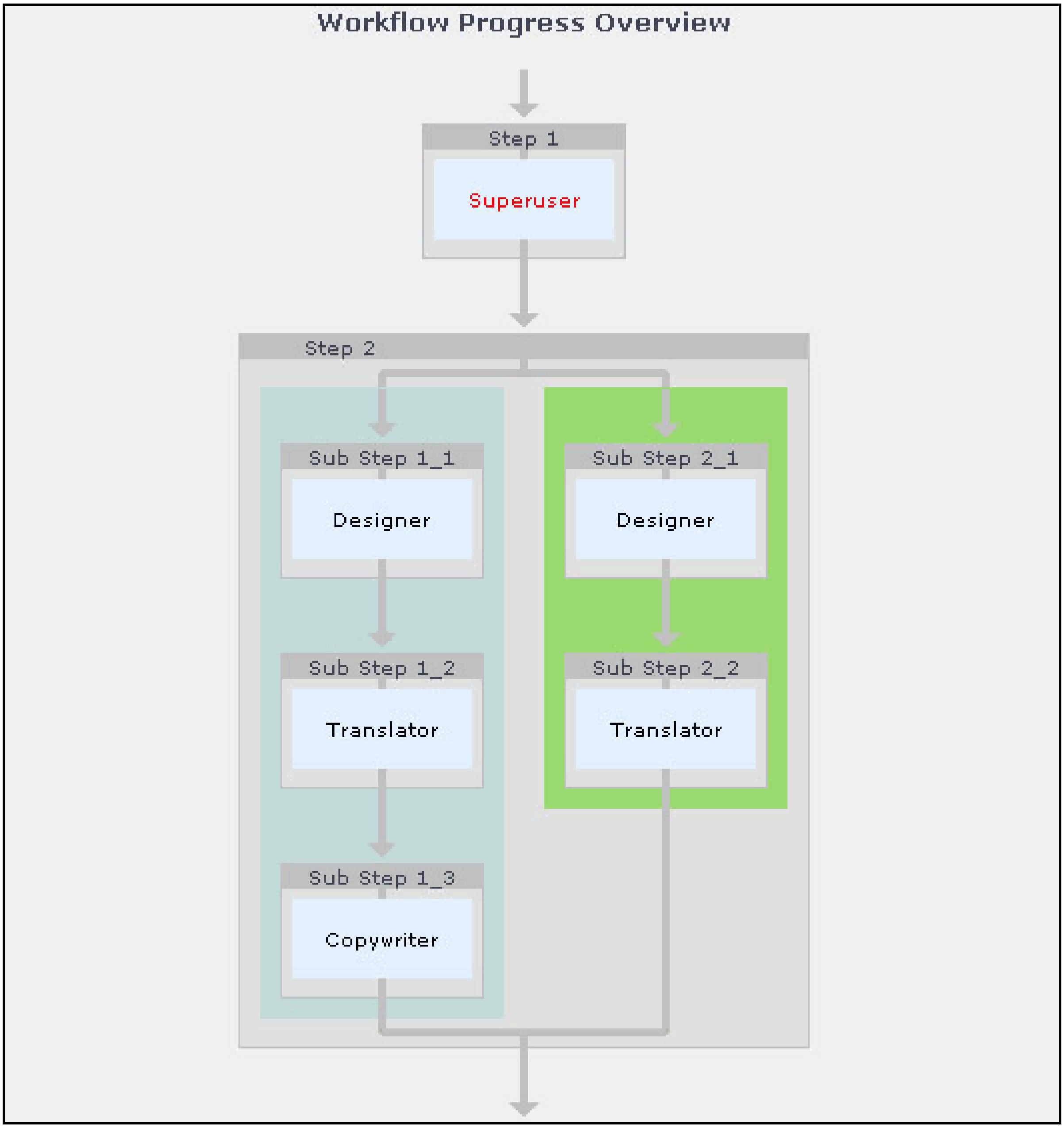
To check the progress of the page in the workflow process open the page and click on the **Page Properties** button in the top right corner:



The dialog that opens contains a tab page named `Workflow` that shows the following information:



- Whether the page is part of a **single page or job package workflow**.
- Whether the page is the root page of a job package **all pages** are listed as well as the **job package title and description.**
- The **name of the workflow process** used.



- The **workflow process definition**. The layout is the same as in the Workflow template.

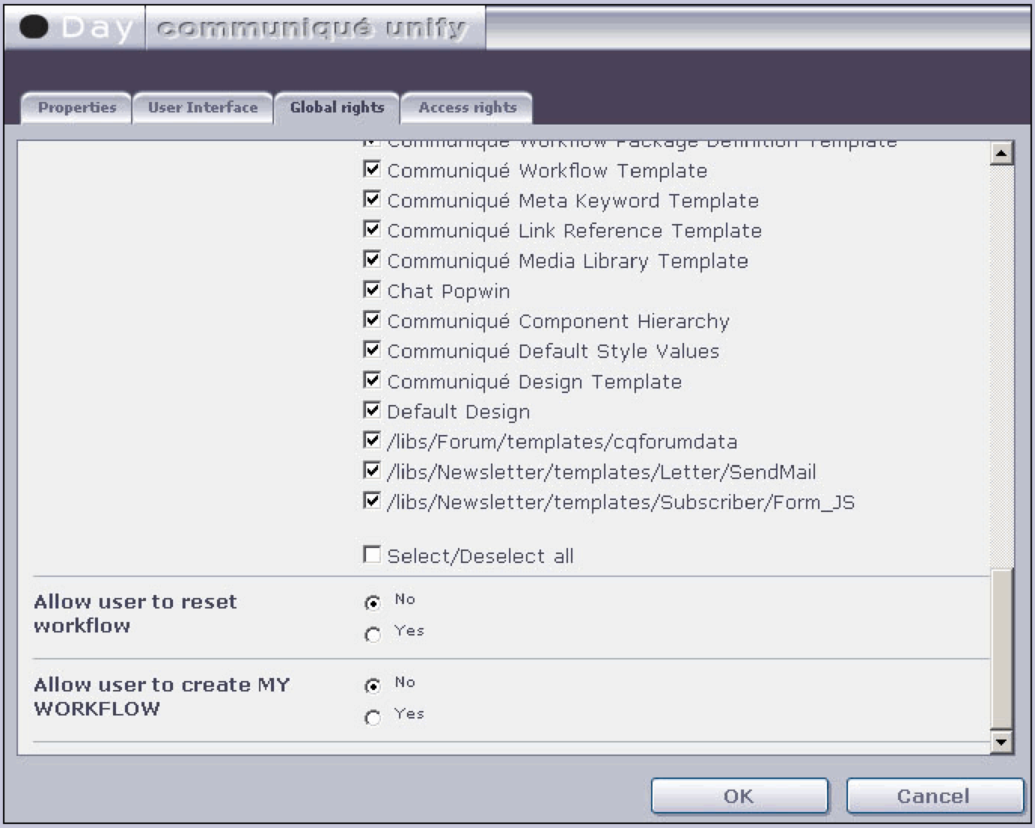
Workflow details for: Products (/content/playground/en/products)

Step	Signed[User]	Duration
Step 1 (|/etc/workflows/playground/parallel_workflow.0001|)	09.10.2002 16:52:30 [superuser]	
Step 2 (|/etc/workflows/playground/parallel_workflow.0002|)	10.10.2002 11:37:54 [superuser]	18h45
Sub Step 1_2 (|/etc/workflows/playground/parallel_workflow.0002|/etc/workflows/playground/parallel_workflow/sub_workflow_one.0002|)	10.10.2002 11:38:09 [superuser]	00h00
Sub Step 2_2 (|/etc/workflows/playground/parallel_workflow.0002|/etc/workflows/playground/parallel_workflow/sub_workflow_two.0002|)	10.10.2002 11:57:20 [superuser]	00h19
Sub Step 1_3 (|/etc/workflows/playground/parallel_workflow.0002|/etc/workflows/playground/parallel_workflow/sub_workflow_one.0003|)	10.10.2002 11:57:39 [superuser]	00h00

- A **workflow process history graph** that shows what steps the page has taken back and forth.
- If the user is **Superuser** a **`Reset Workflow`** button is visible that removes the **current page** from the workflow process.

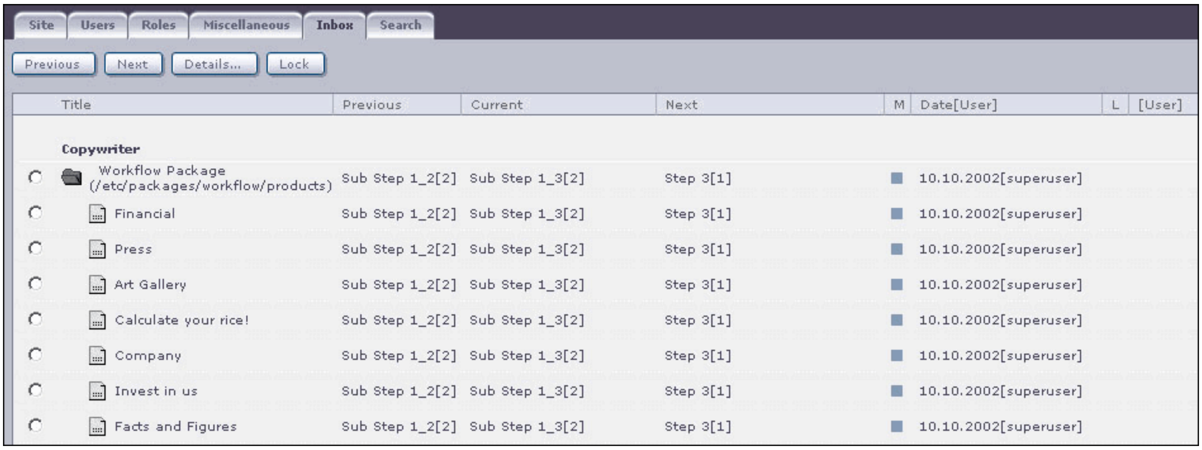
The **`Reset Workflow`** button only removes the **current page** from the workflow process. If there are multiple pages in the workflow package they are still handled as **one job package** even if you remove the root page of the page tree.

In the **`Global Rights`** tab of the **`User Properties`** Dialog you can now assign the right to reset a workflow to individual users.



1.4.5. Inbox

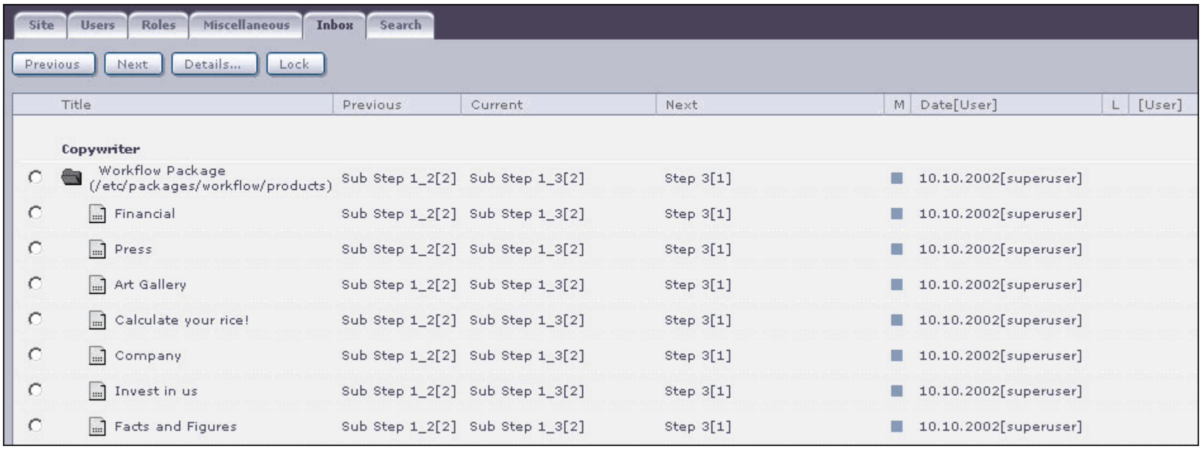
When a workflow process is started or taken to the next step then all workflow participants that have been assigned to the next active step either by user **or** role get a workflow item in their **inbox** view of the CMS console:



Inbox Element	Description
Roles/User	An author can have different roles in different workflow processes or steps at the same time so all **workflow packages are grouped by roles and the user**. An author will also **see all workflow packages that have been assigned to subroles and subusers** of himself. In this way a parent role or parent user can promote a package to the next step, thus playing the role of a supervisor.
Workflow Package Single Page	The workflow package to be processed. If it's a **single page** a document symbol is shown and the title text of the page. If it's a **job package** a folder symbol is shown an the job package title. Click on the folder icon to expand it and show all pages that are part of this package. **Note :** A workflow participant only sees the pages of a package where he has at least **read rights**.
Workflow Steps	The following tree steps of the workflow process for each package are visible: **Previous**: Name of the **previous workflow step**. Set to `[start]` if the

	current step is the first. **Current**: The name of the **current step assigned to this author**. **Next**: Name of the **next step** in the workflow process definition. Set to `[activate]` if the current step is the last and the next step is activation of the package.
Page Status	Shows **author's name and date** of when the package was sent to the current author. **Note**: If multiple users/roles have been assigned to the previous step, the author who last promoted the package is displayed.
Lock Status	A page can be **locked** using the lock button in the top left corner of in the toolbar of the page itself. If the page is locked a red dot is set together with the name of the author who locked the page.
Workflow Action	**Functions** that can be executed on the **selected Inbox entry**.

1.4.5.1. Workflow Actions



The available **Workflow actions** you can execute on a **item in the Inbox list** are located in the top left corner of the Inbox page. The action is performed on the item that was selected by setting the **Action Target** radio button.

There are three types of workflow items you can select in the list:

- A **workflow job package**.
- A **page of a workflow job package**.
- A **Single Page workflow package**.

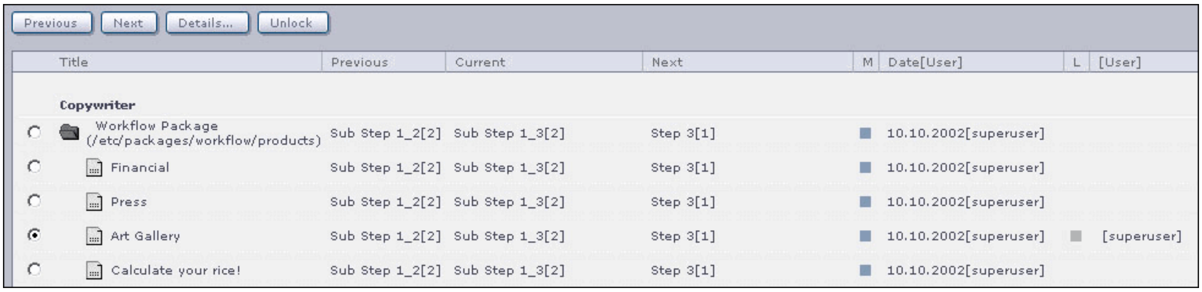
Some actions become unavailable depending on which one of these types you select.

Workflow Actions

- Lock/Unlock/Break Lock
- Previous
- Next
- Details

1.4.5.1.1. Lock/Unlock/Break Lock

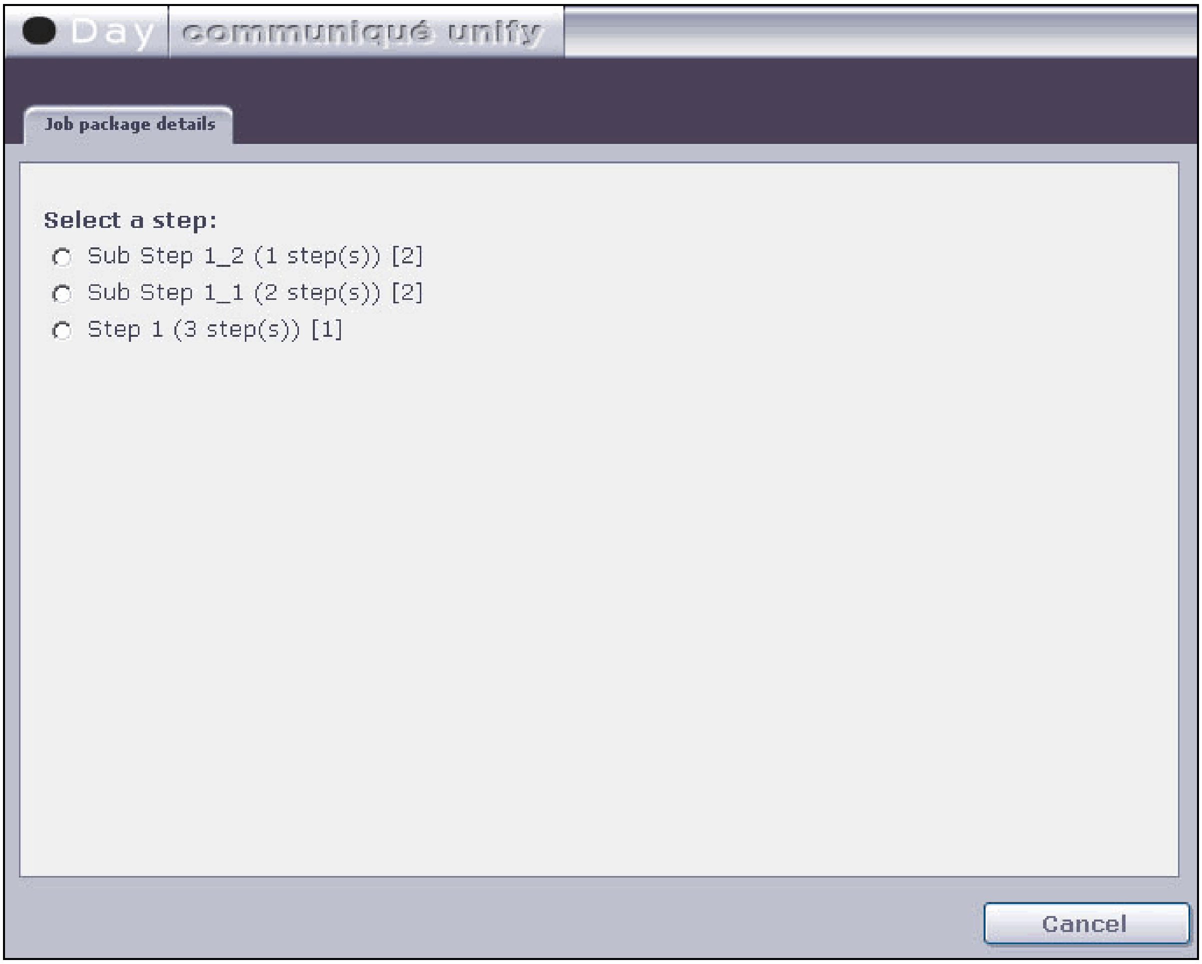
The button is labeled either as **`Lock`**, **`Unlock`** or **`Break Lock`** depending on the current state of the selected item:



It has the same function as the Lock/Unlock/Break Lock Button in the toolbar of the page itself. You can use it to either **lock or unlock the page or to break the lock** set by another author.

1.4.5.1.2. Previous

If a workflow participant wants to **send back a workflow package** he can do this by using the **Previous** action. The following dialog will open:



The dialog lists all steps through which the current item has thus far proceeded. This allows the current workflow item owner to **send the item back more then just one step**.

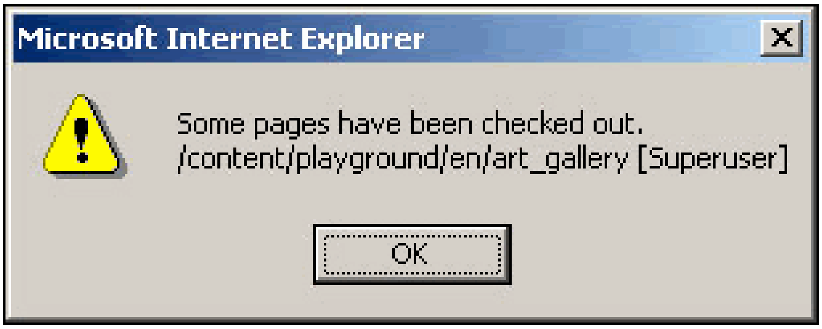
Because content change is based on the defined subscribers, moving to another instance can only happen in a forward direction.

If the workflow package owner is already the first in the workflow process he will get an error message:

The topmost user in the user hierarchy, the **Superuser**, is the only one that can send a **single page of a workflow job package** backwards.

If he does so the page will automatically be removed from the inbox of all other workflow participants that are in the same step and it will appear in the inbox of the authors that are assigned to the previous step.

If any page of a workflow package is locked, the workflow package cannot be sent backwards. The following error message appears, listing the locked page(s):



To be able to send the workflow job package back all locks must either be released by the author who set the locks, or the current workflow package owner breaks the locks.

1.4.5.1.3. Next

If the current workflow package owner has finished his work on the page(s) he **sends the workflow packages to the next step** by clicking on the **`next`** button.

He must confirm his action in the message box that will pop up:

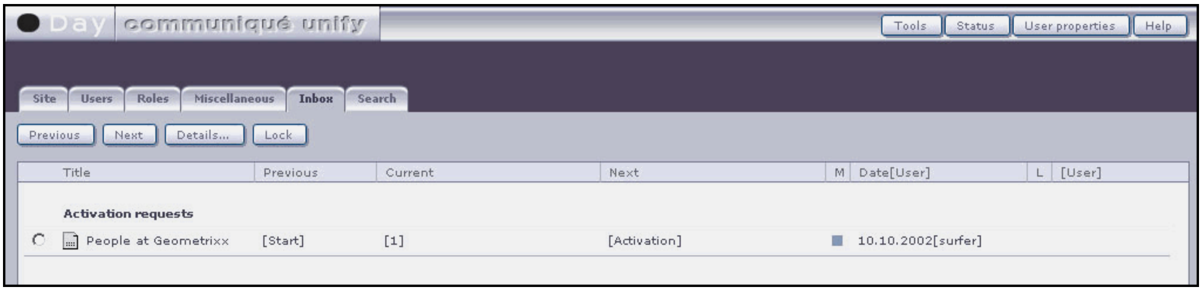
If the current workflow package owner is the **last in the workflow process**, the next step would be **activating the pages**. The following message box will appear:

If the workflow package is a job package and **not all pages are in the last step**, activation is not possible. The following error message will appear:

If this **last user doesn't have the activation rights** for all pages in the workflow package he will get

the following message instead:

If he confirms than **all authors that have the activation rights for all the pages in question** will get an **Activation Request** in their Inbox:



These authors then execute the activation by selecting the package and using the `Next` Button.

The **superuser** is the only one that can send a **single page of a workflow job package forward**.

To do this he **must promote the page for each workflow participants of the current step** before it gets removed from the their inbox and appears in the inbox of the authors that are assigned to the next step.

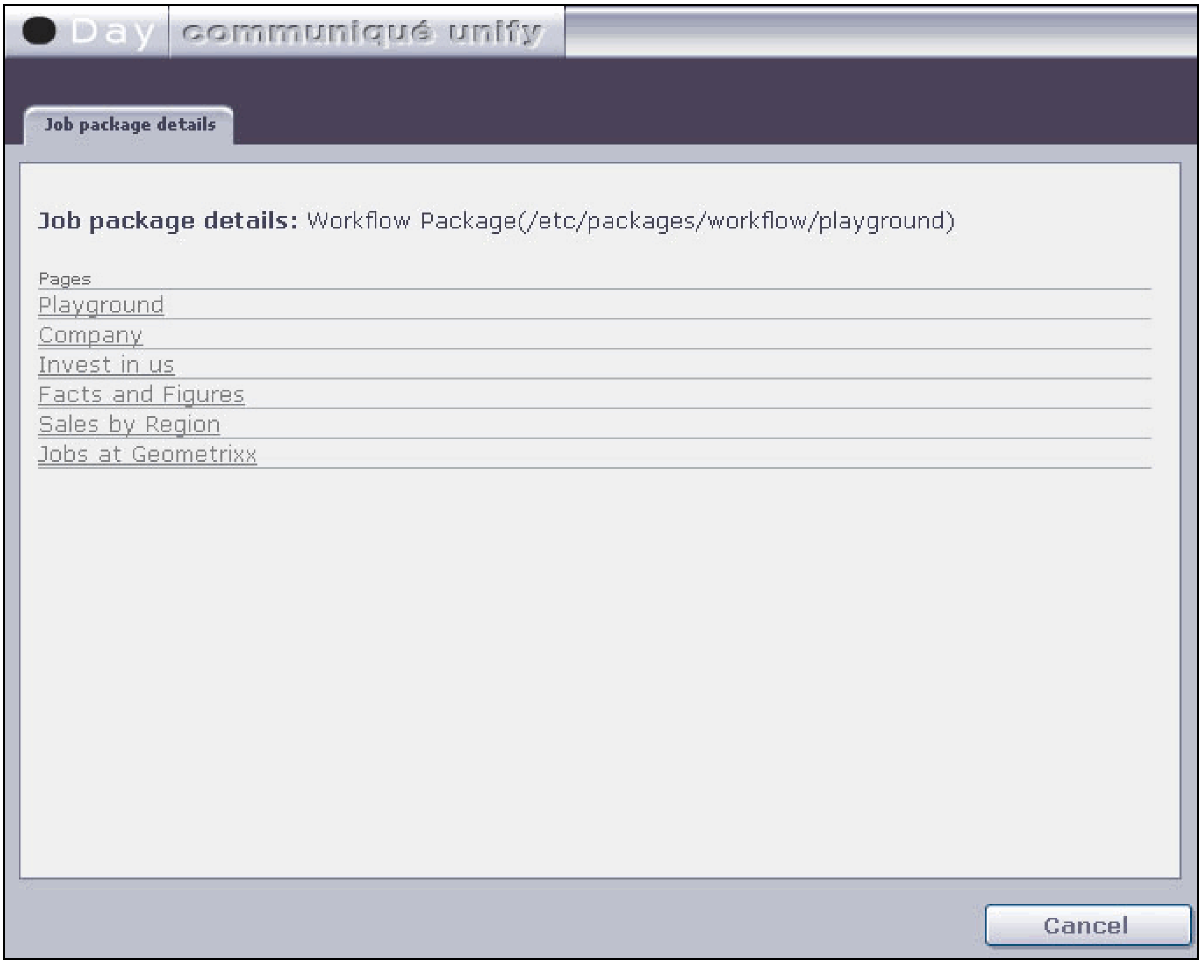
If any page of a workflow package is locked, you can't send the workflow package forth. The following error message appears, listing all pages that are locked:

To be able to send the workflow package forth all the locks must either be released by the author who set the locks, or the current workflow package owner breaks the locks.

1.4.5.1.4. Details

This opens a dialog showing details about the current status of the selected item in the Inbox list. The output differs depending on the type of item selected.

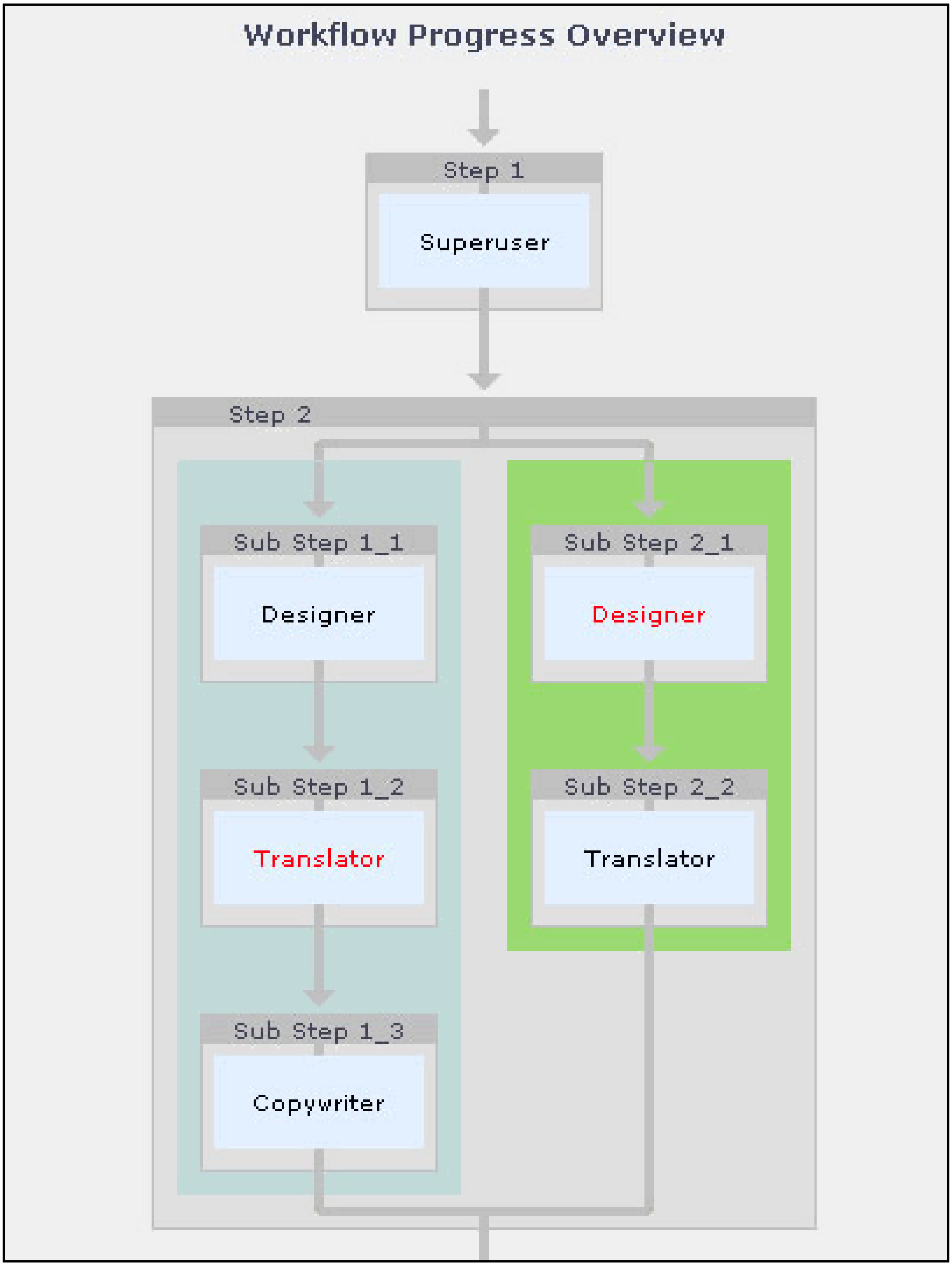
For a **workflow job package**:



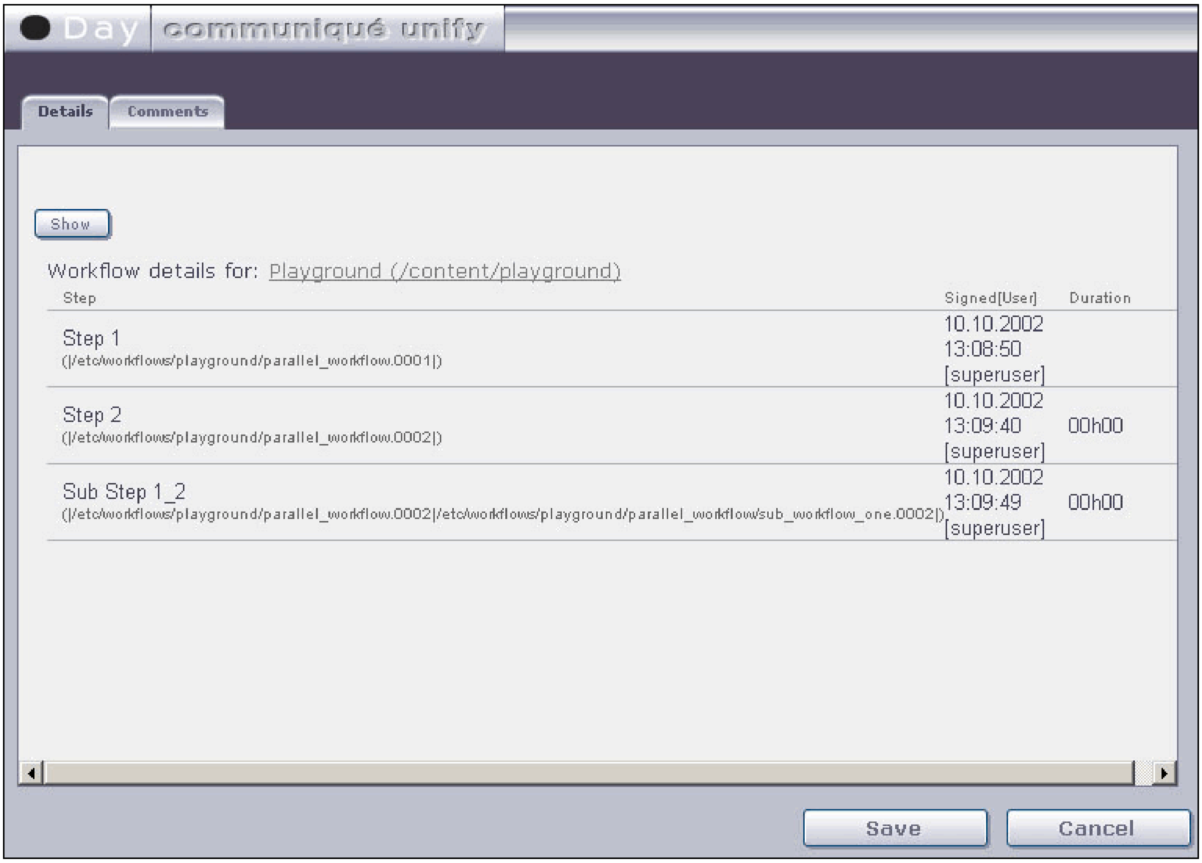
All pages of the **job package** are listed and linked. Pressing the link will open the selected page in a new window. Here you can open the **Page Properties** dialog and see the progress of the page using the **show** button within the **tab workflow**.

One page of the package can be in a different step of the workflow process then the rest. But before a package can be activated all pages must be in the last step otherwise an error message will appear.

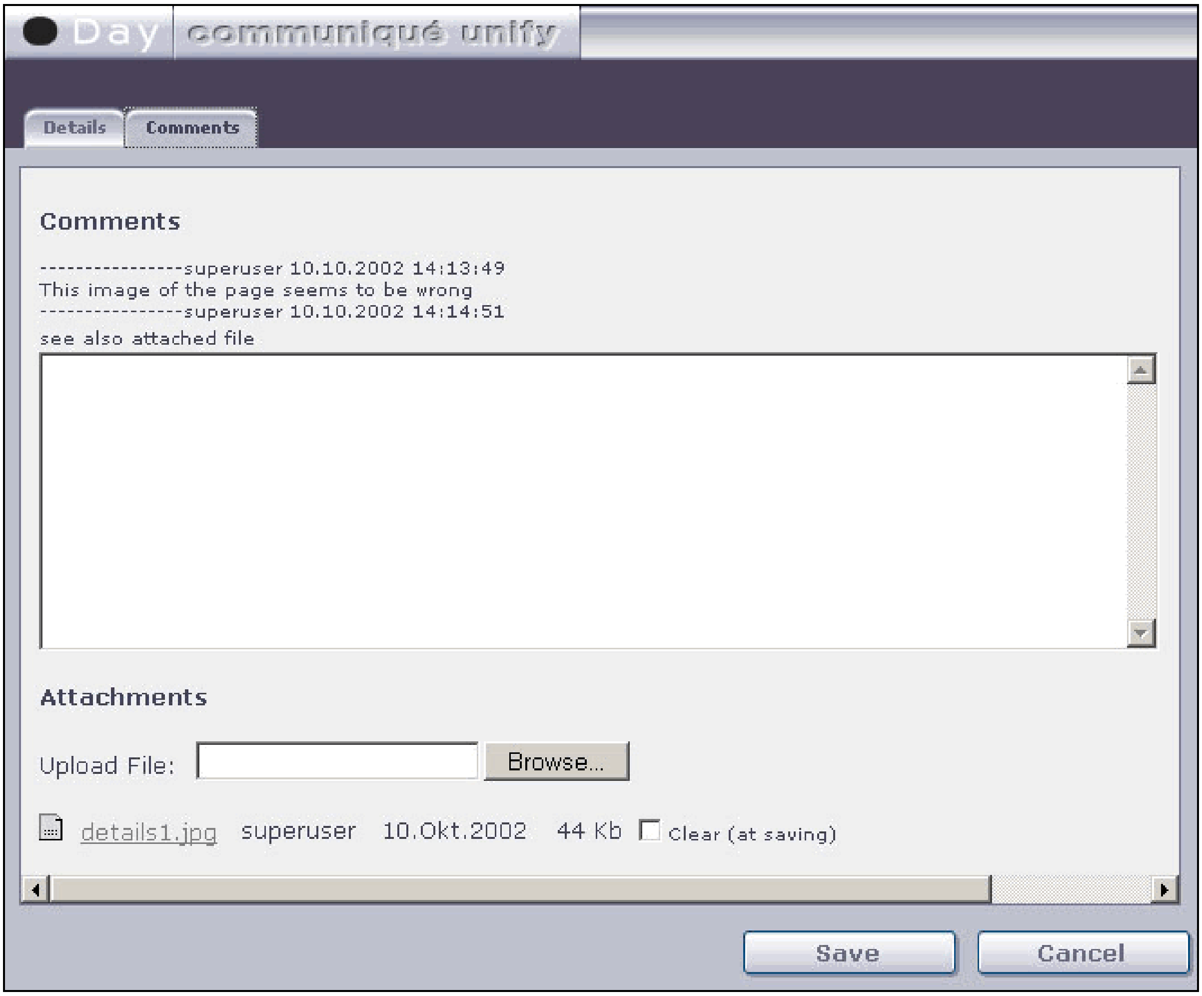
For a **single page workflow package** and a **page within a workflow job package** the detail dialog is the same:



On the first tab page you will see the same **workflow progress history graph** as in the Page Properties dialog of the page itself. It shows the steps the page has already taken in the workflow process, who the sender was, and how long each step took:



On the second tab page the current workflow package owner can see the comments and files uploaded by previous package owners and **add his own comments or upload files** before sending the workflow package to the next step:


Day
communiqué unify
Details
Comments
Comments
---------------superuser 10.10.2002 14:13:49
This image of the page seems to be wrong
---------------superuser 10.10.2002 14:14:51
see also attached file
Attachments
Upload File:
Browse...
details1.jpg superuser 10.Okt.2002 44 Kb
Clear (at saving)
Save
Cancel

1.4.6. True parallel Workflows

With the introduction of the possibility to define a sub workflow as a step in a super workflow it is now possible to map all kind of complex processes.

For example :

- Parallel steps with more than one sub step (was limited to one step in the former releases)
- Delegate responsibility to sub workflows (define, create, edit sub workflow) within a true parallel workflow.

1.4.7. Automatic Advance

When the escalation time exceeds and the automatic advance flag (set on per step basis) is set, the page is automatically forwarded to the next step (it simulates the click on the next button in the inbox).

Use this feature with care as it activates pages as well if defined.

1.4.8. Script Execution as Workflow Step

It is possible to assign a scriptable method to a step instead of a user or role. The script is executed on the server side and has the same possiblites as an normal script. For Example :

- Content modifications
- Trigger a mail, sms etc.
- Create pdf
- etc.

1.4.9. Conditional Workfows

The conditions you can enter/edit are interpreted and executed on the server. The content of the current page in the workflow can be accessed using the **`this.pageObj`** object.

We distinguish between two different condition handlings, depending on the return value of the condition statement:

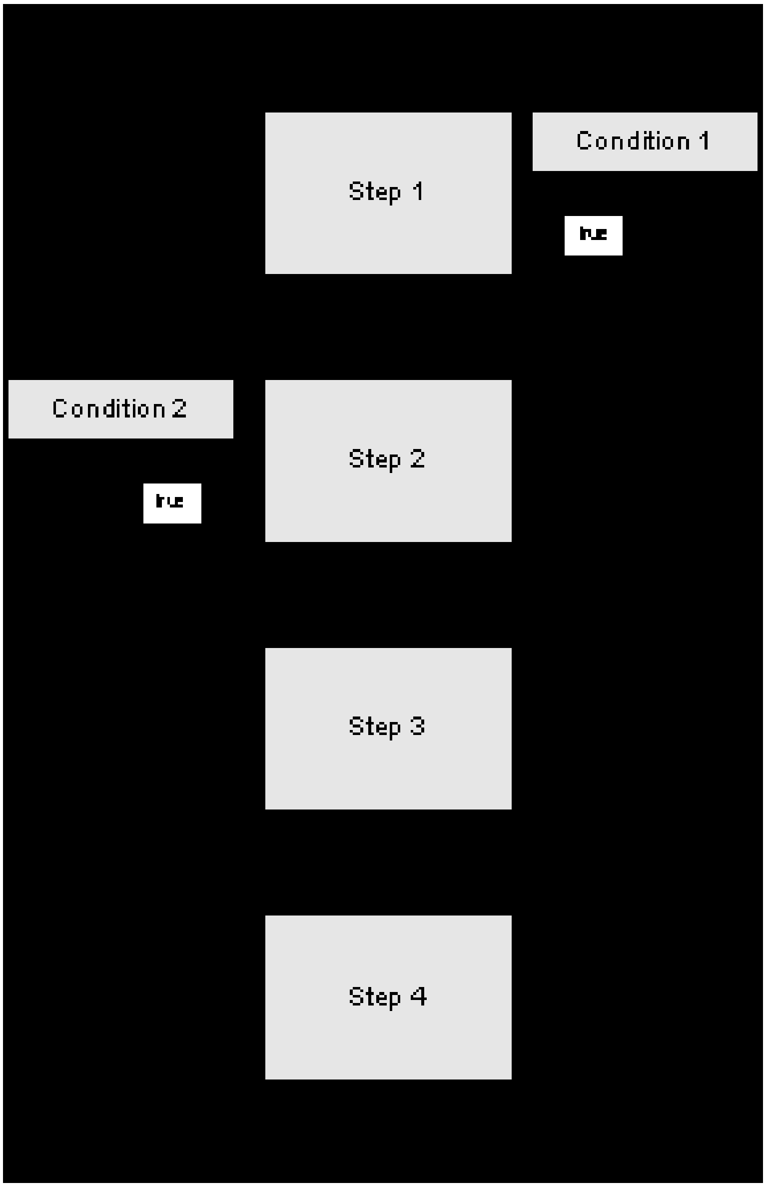
Conditional Workfows

- Conditional Jumps
- Parallel Steps Selection

1.4.9.1. Conditional Jumps

Using conditions you can define if a one or more workflow steps are to be skipped.

For Example :



A condition can look like:

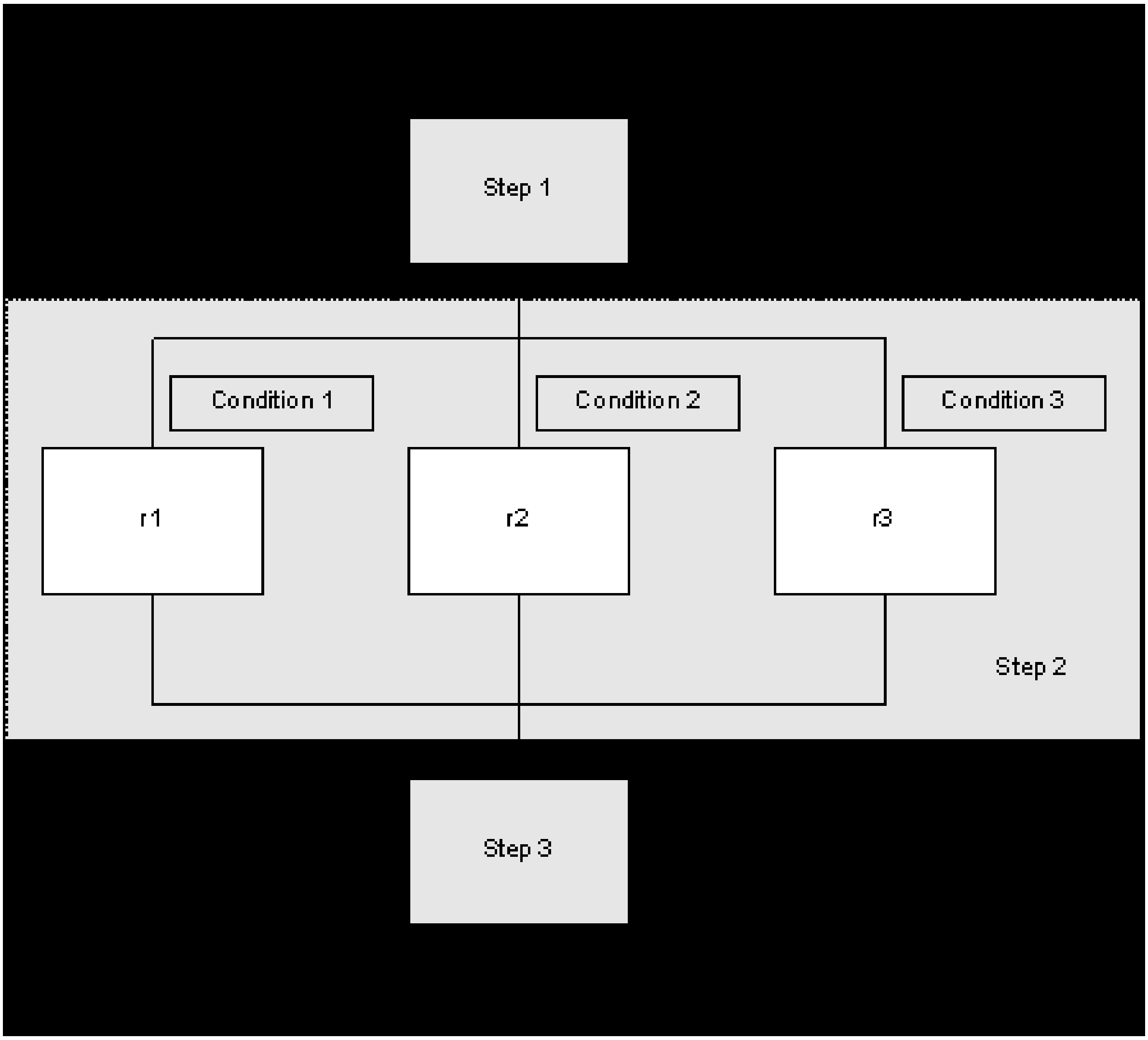
```
if(this.pageObj.contents.TitleText.toString() == 'JUMP')
  {
  '/access/roles/super/cs_editor@|/etc/workflows/customer_satifaction.0003|';
  }
```

The string returned by the condition in the above example is the destination step in the workflow to

jump to. You can use the **step browser** in the workflow designer to set the destination step.

1.4.9.2. Parallel Steps Selection

For example you have a step with a number of roles that can be assigned to this one step depending on a certain condition :



The conditions in the above flow chart could be for example :

- Condition 1 : Enter if `de_designer` flag is set
- Condition 2 : Enter if `en_designer` flag is set
- Condition 3 : Enter if `fr_designer` flag is set

A condition can look like:

```
if (this.pageObj.contents.DesignerFlag.toString() =='fr_designer') {
  'true';
} else {
```

```
  'false';
}
```

In such a case the return value is not a destination workflow step but either `true` or `false` indicating that the next workfow step is to be entered or not.

1.4.10. Conditional Workflow Selection

A condition can be defined in the page properties of the workflow to control the availability of the workflow.

For a example if you have a condition defined as following :

```
if (this.pageObj.getHandle().indexOf("/shop/")>=0) {
  'true';
} else {
  'false';
}
```

Then the workflow is only available for pages , who's handle contains the substring `/shop/`.

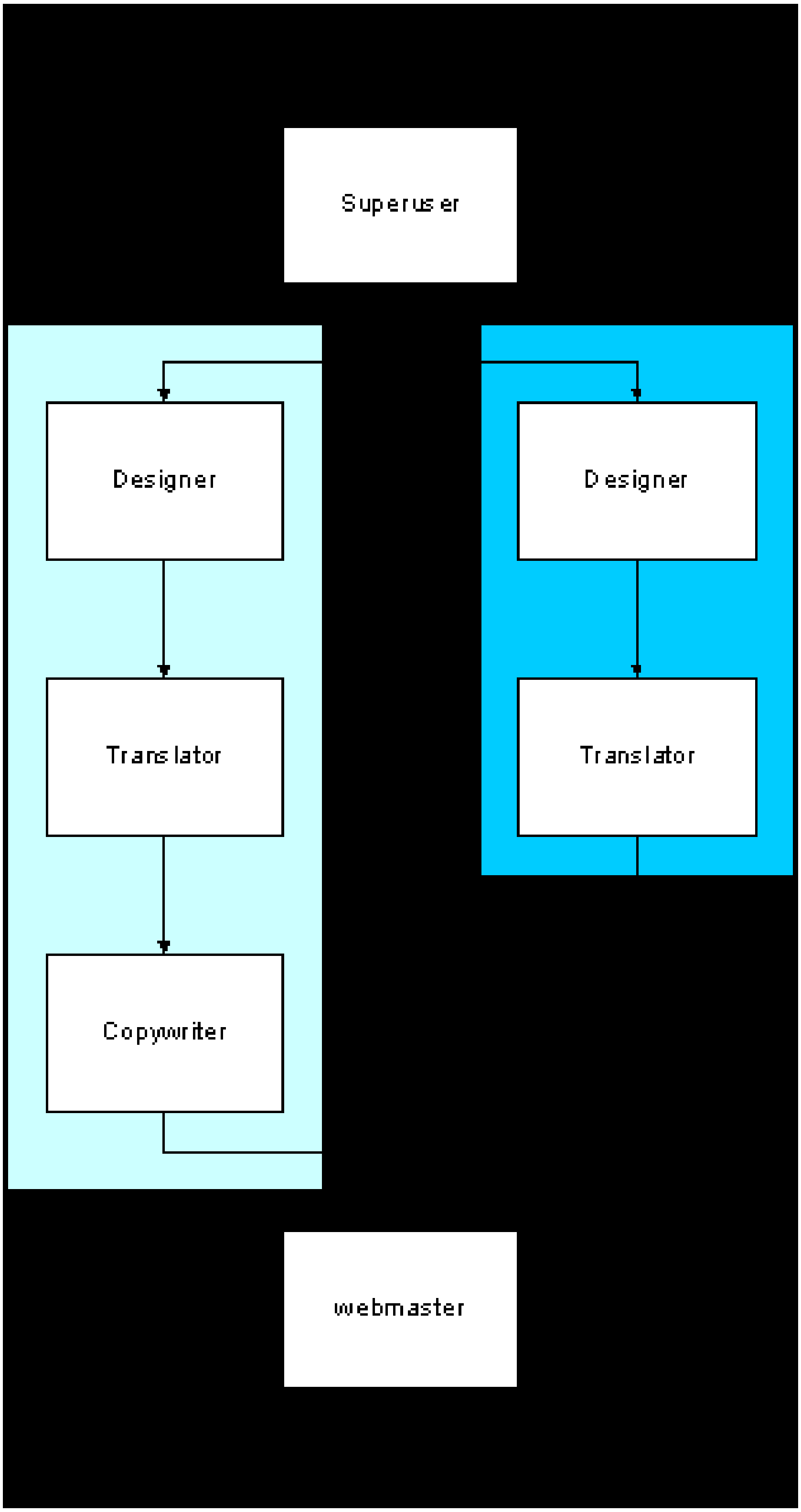
1.4.11. Examples

Examples

- Parallel Workflow
- Conditional Workflow

1.4.11.1. Parallel Workflow

In this example we want to map the following process to a workflow :

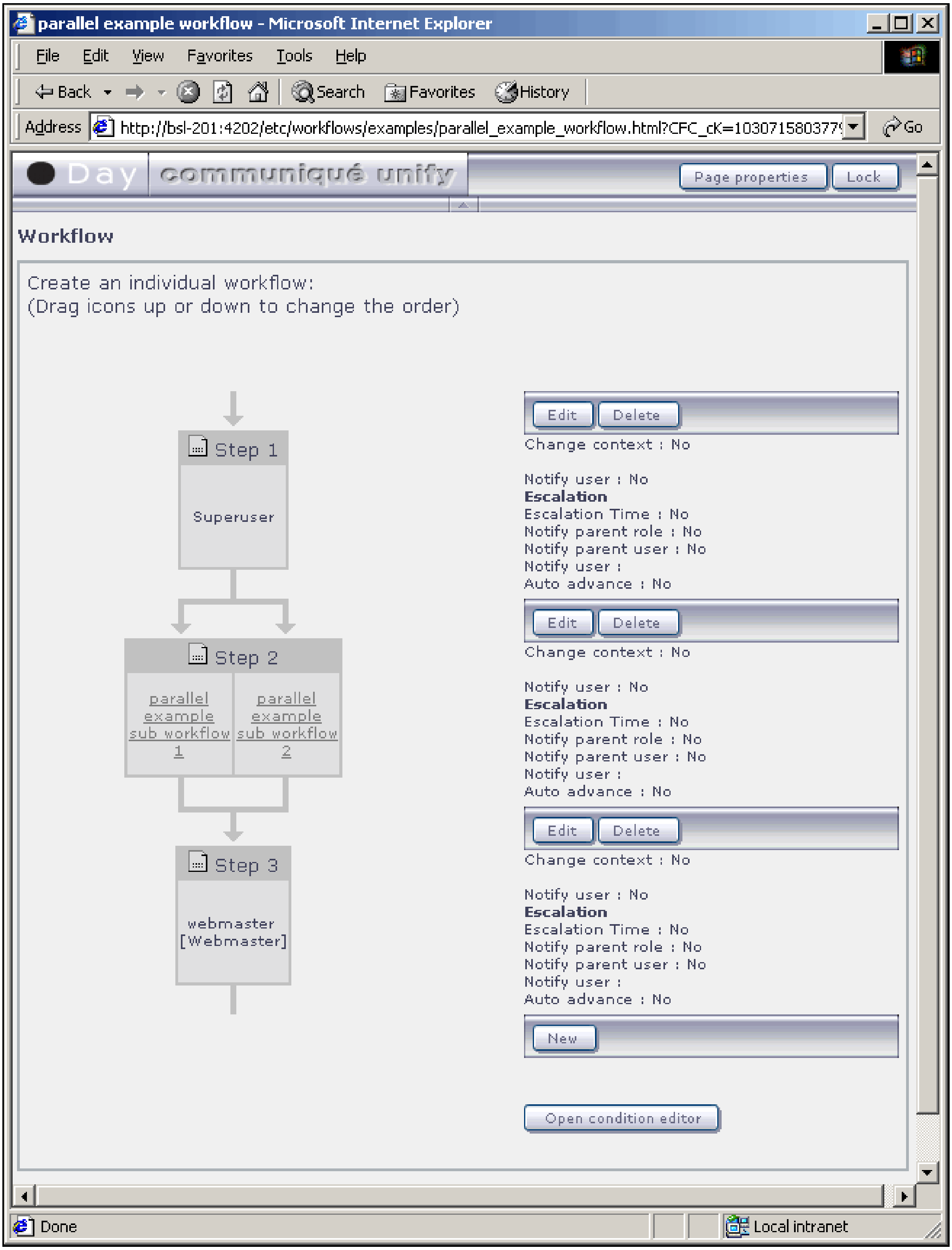


This is done by :

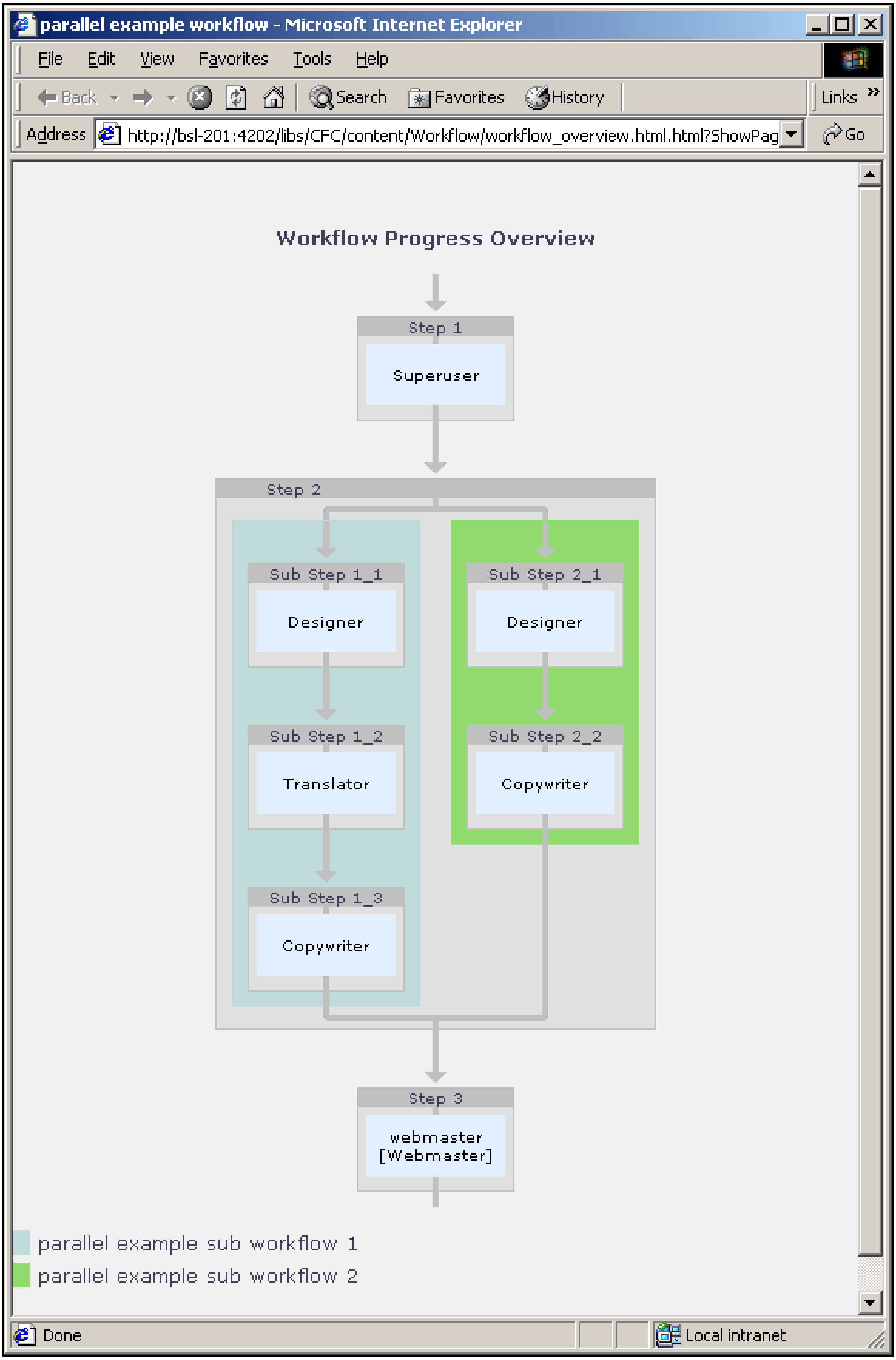
- Creating the two sub workflows

- Creating the main workflow and including the sub workflows

Following is the workflow definition of the main workflow :

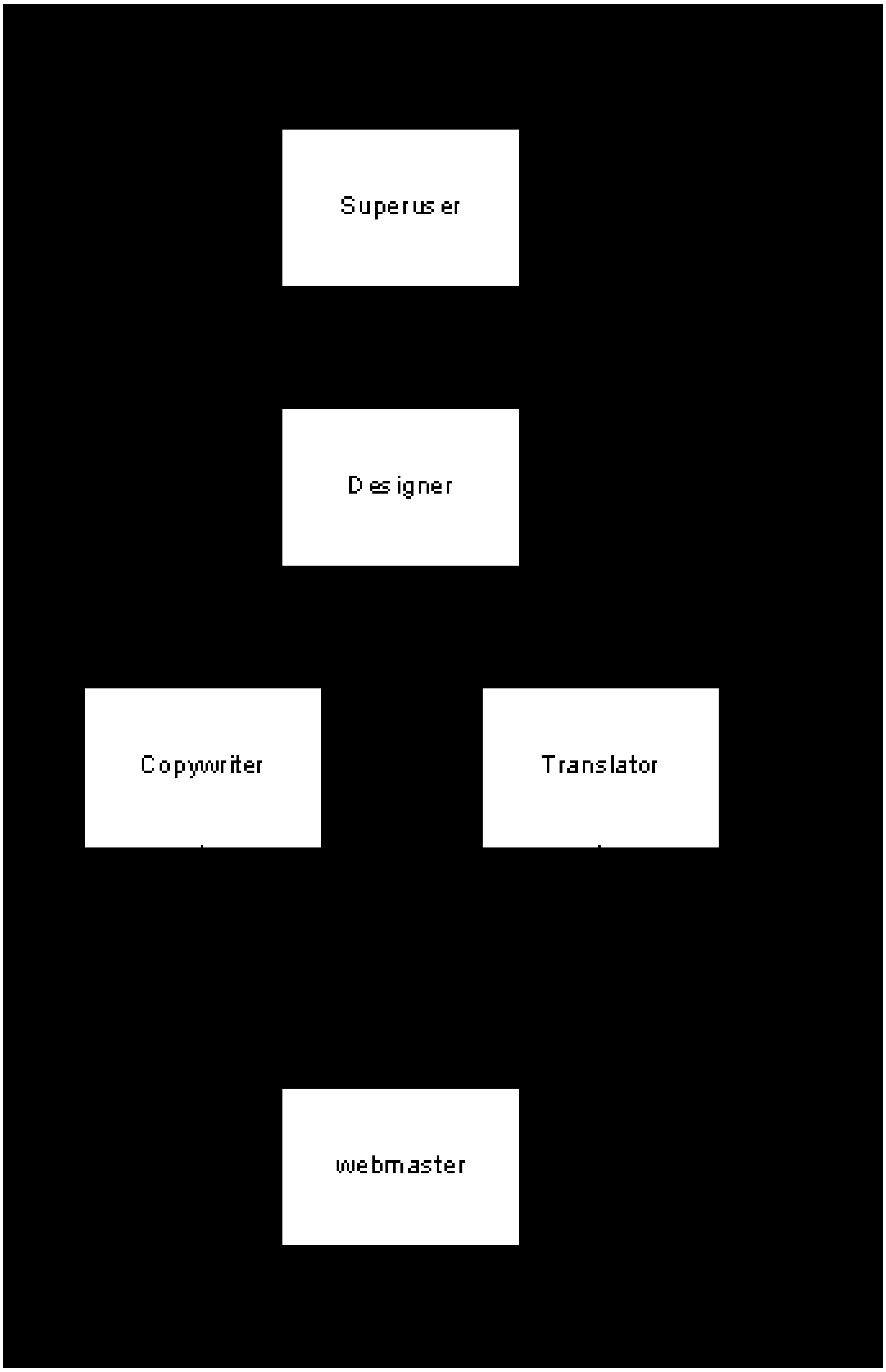


The overview of the main workflow would then show :


parallel example workflow - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History Links
Address http://bsl-201:4202/libs/CFC/content/Workflow/workflow_overview.html.html?ShowPag Go
Workflow Progress Overview
Step 1
Superuser
Step 2
Sub Step 1_1
Designer
Sub Step 2_1
Designer
Sub Step 1_2
Translator
Sub Step 2_2
Copywriter
Sub Step 1_3
Copywriter
Step 3
webmaster
[Webmaster]
parallel example sub workflow 1
parallel example sub workflow 2
Done
Local intranet

1.4.11.2. Conditional Workflow

In this example we want to map the following process into a workflow :



The Conditions are as following :

- Condition 1 should check if **`TitleText == #GO#`**. If condition 1 is **`true`** than jump to **Step 4 (webmaster)**
- Condition 1_3 should check if **`PageTitle == ##`**. If condition 1_3 is **`true`** than enter
- Condition 2_3 should check if **`PageTitle != ""`**. If condition 2_3 is **`true`** than enter

Expected behaviour:
If TitleText equals #GO# :

- Enter Step 1 -> Click next
- Enters Step 4 (skip Step 2 and Step 3)

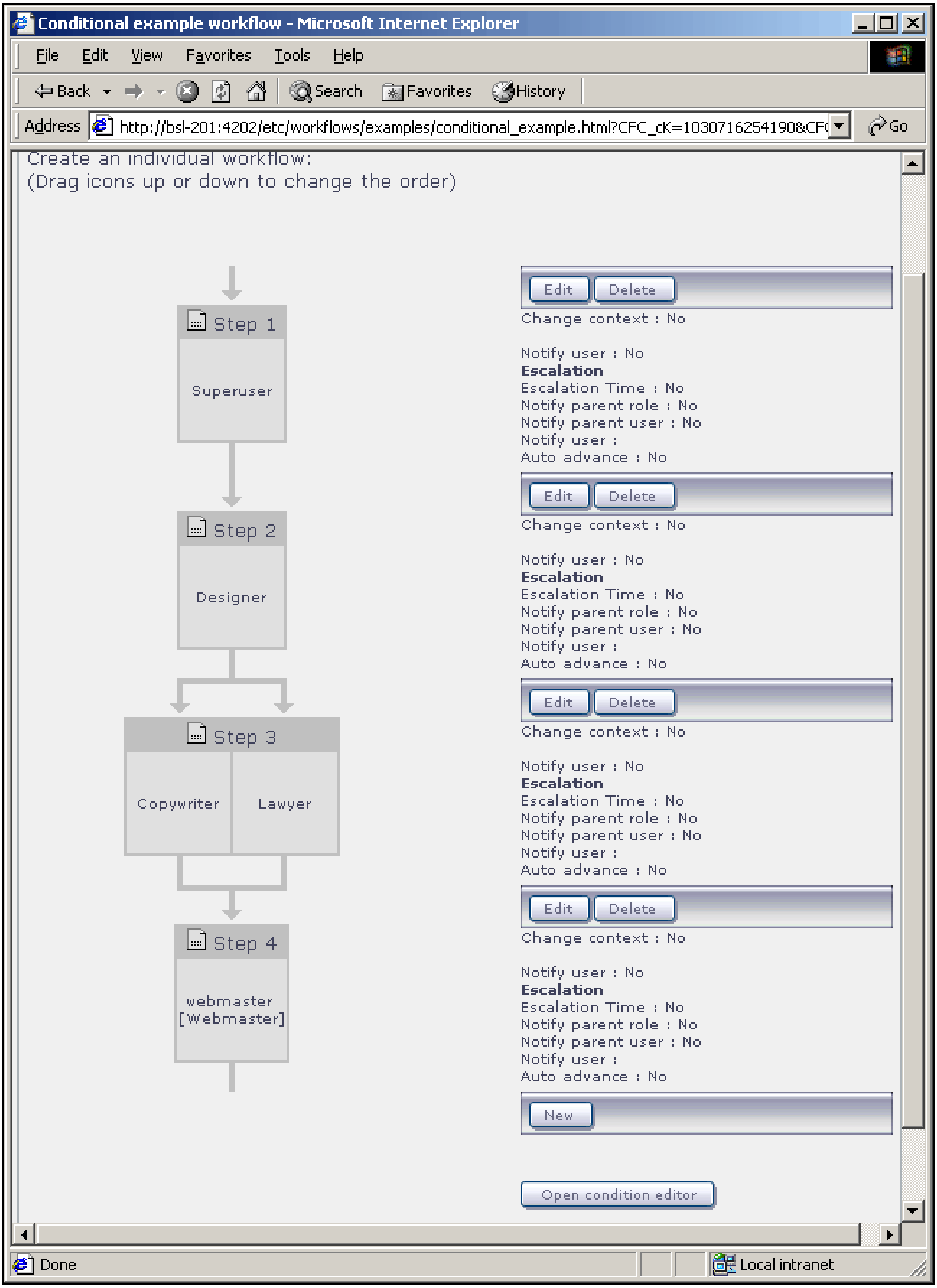
If TitleText not equal #GO# and PageTitle is empty

- Enter Step 1 -> Click next
- Enter Step 2 -> Click next
- Enter Step 3 with role Copywriter -> Click next
- Enter Step 4

If TitleText not equal #GO# and PageTitle is set

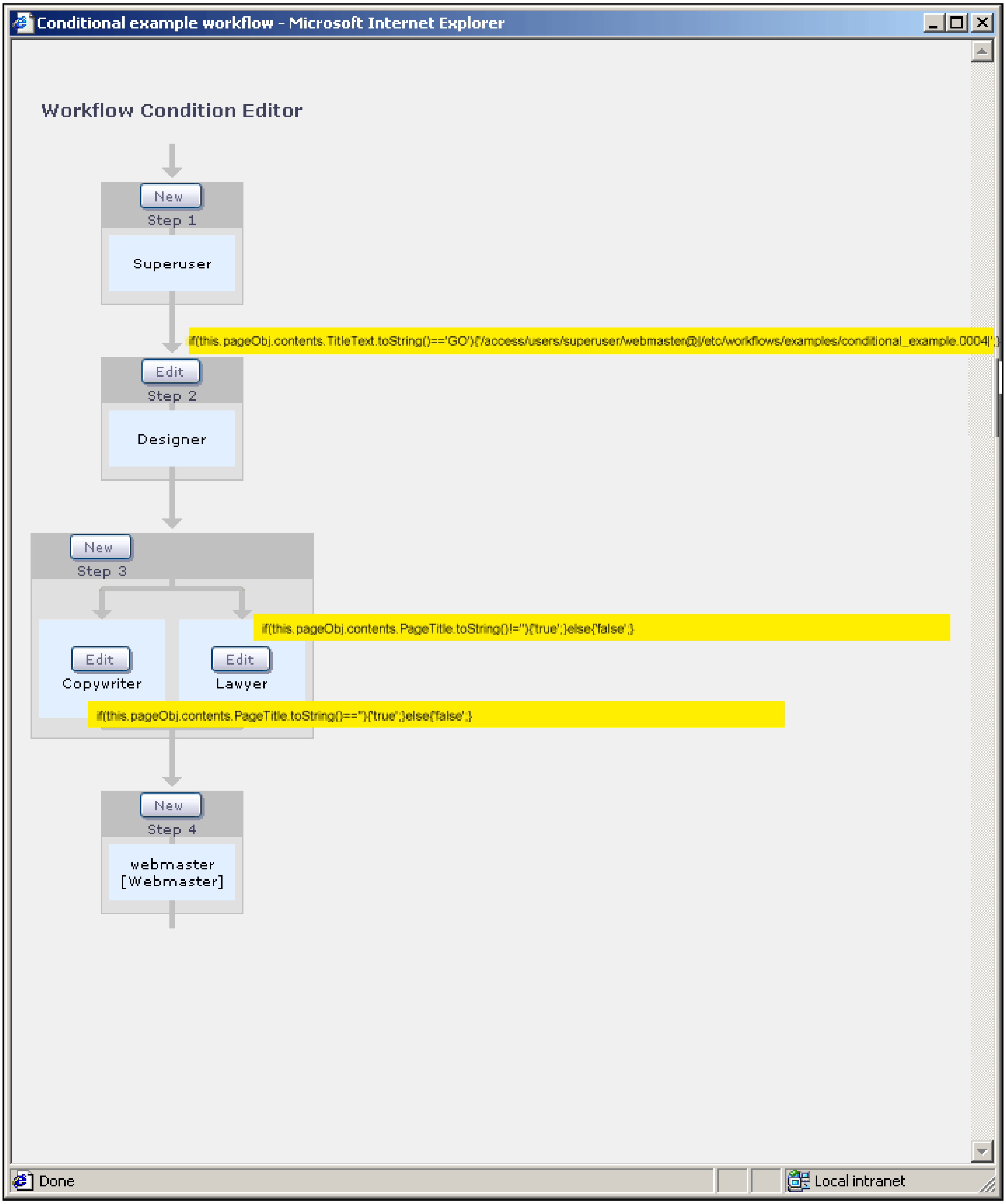
- Enter Step 1 -> Click next
- Enter Step 2 -> Click next
- Enter Step 3 with role Lawyer -> Click next
- Enter Step 4

The workflow definition would look as following :



The condition editor would show (the yellow strings are the tooltips shown when cursor is over edit

button) :



Condition 1:

```
if (this.pageObj.contents.TitleText.toString()=='GO') {
'/access/users/superuser/webmaster@|/etc/workflows/examples/conditional_example.0004|';
}
```

Condition 1_3:

```
if (this.pageObj.contents.PageTitle.toString()=='') {
  'true';
} else {
  'false';
}
```

Condition 2_3:

```
if (this.pageObj.contents.PageTitle.toString() != '') {
  'true';
} else {
  'false';
}
```

1.4.12. Using Forms Within Worfkflow Steps

It is possible to assign a form page to a workflow step. This feature can be used to build simple applications or just to simplify user input. For example, there might be a template with 30 different input fields of which only 5 are relevant to the user who is assigned to a particular step. In such a case a form within the workflow step can be used to simplify the data input options placed before the user.

There are two main ways to integrate forms into a workflow step: Simple Forms Binding and Application-Specific Forms Binding. These are described in the following pages:

- Simple Forms Binding
- Application-Specific Forms Binding

1.4.12.1. Simple Forms Binding

Simple Forms Binding is the name we give to simply assigning a form page to a certain workflow step. When this is done, the form page is opened instead of the origin page in the the inbox (the document icon changes into a form icon). The form must provide its own functionality in terms of reading and writing with the origin page in the workflow. The Forms library provides the required actions.

1.4.12.2. Application-Specific Forms Binding

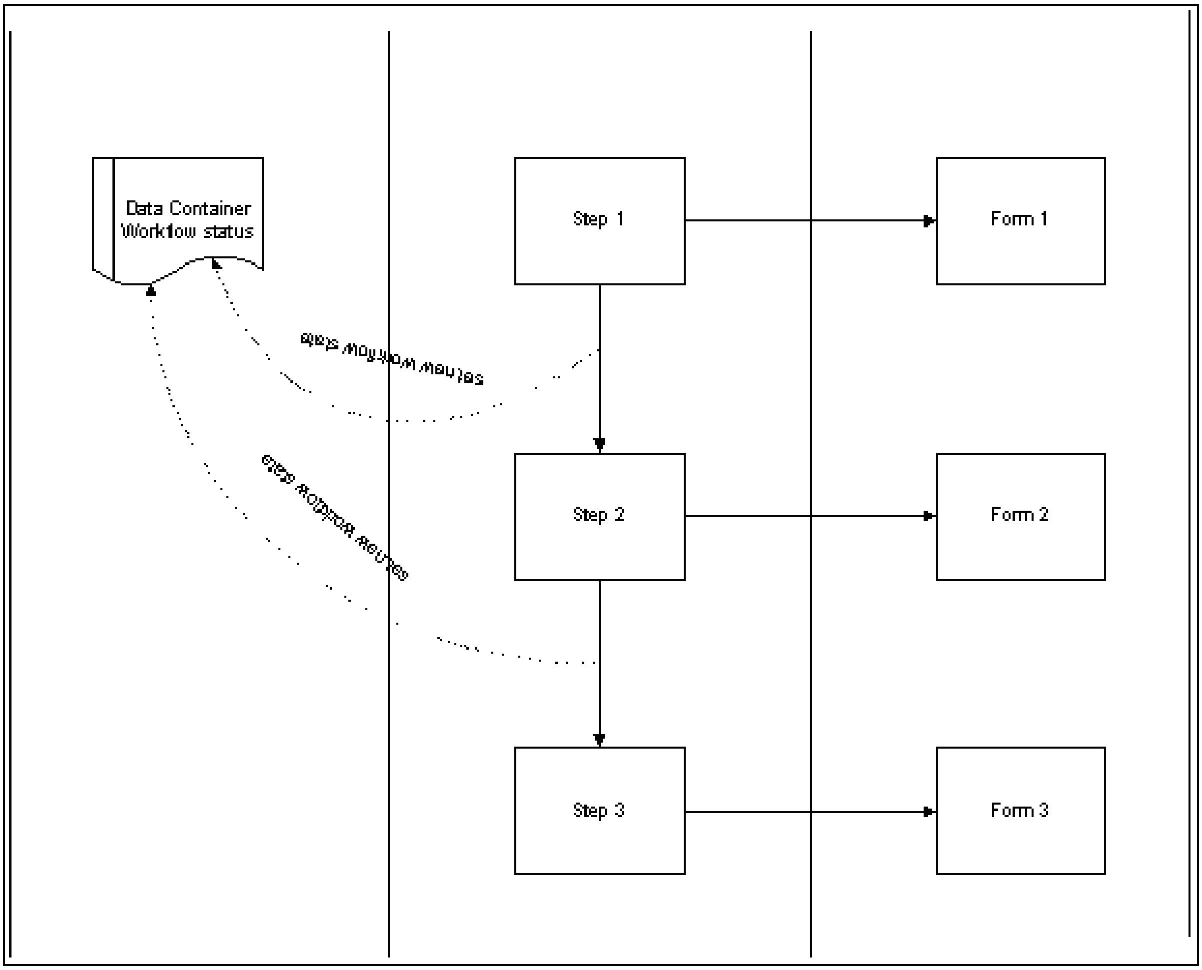
It is possible to build simple applications by assigning forms to workflow steps. The following example shows how the use of forms within a workflow might simplify the process of assigning a new user to a web site.

The process of creating a new user is first set up as a workflow consisting of the following steps

- 1st step: Fill in user specific data
- 2nd step: Set user rights
- 3rd step: Authorize settings and activate user

For each step a form page is defined so that the person responsible for that step needs only to fill in certain fields and submit the changes or additions.

The following schematic illustrates the process:



The submit action requires a workflow status change plus a write back of data from the forms page to

the “Data Container”. The Forms library is used to perform these actions.

There are two ways that this example could work. The first possibility is:

- A new item shows up in the inbox of an assigned user.
- The user selects this item.
- The forms page is displayed.
- The user fills in all needed data and submits the form.
- The form action saves the submitted data into the Data Container and computes the new workflow status, which is saved as well.
- The item will appear in the inbox of the user who is responsible for Step 2… and so on.

The second possibility is that of a single user who wants to proceed through the whole process (not just a single step) without going through the normal routine of having things arrive in the inbox, clicking them, etc. This process would go like this:

- The user gets or creates a new Data Container (that is, a new task).
- This task is than automatically put into a workflow.
- The user can now select the newly created task and a form will pop up.
- After submitting the form, the form of the next step pops up and so on until the task is finished.

Using the Workflow and Forms library it is quite easy to build a simple application to perform either of these procedures.

Having forms assigned to single workflow steps is just the first step in building simple applications. The introduction of Workflow Conditions and Pre- and Post methods in conjunction with the attached forms pages can make the application even more intelligent and flexible.

1.4.12.3. Pre and Post Methods

`Pre` and **`Post`** methods are user-defined methods that can be invoked on every workflow step. You can also pass a parameter string (comma separated) to the methods. In addition, you always have access to the page which is currently in this workflow step.

The **`Pre`** method is called right before the new workflow state is saved. It makes it possible to modify the workflow state and call user-defined actions. Some examples of user defined actions are:

- Substitute a role handle with a user handle so that the step owner is generated dynamically at run time.
- Create a new page in another language tree and submit this page into a translation workflow.
- Trigger some other actions.

The **`Post`** method is called right after the new workflow state is set. Different user-defined actions could be called. For example:

- Trigger special user defined notification action (like sending an SMS, for example)
- Terminate workflow
- Create a new page in another language tree and submit this page into a translation workflow.
- And many other actions

Method signatures

The **`Pre`** and **`Post`** methods must be placed in following files:

`/apps/CFC/templates/Workflow/PreWorkflowScripts.esp`

`/apps/CFC/templates/Workflow/PostWorkflowScripts.esp`

The parameters specified per step are passed as an object to the methods.

`Pre` methods:

```
PreWorkflowScripts.<Method name> = function(/* Object */ params)
  {
  /*
  It is possible to modify the newly generated workflow status before saving.
  The status is set in the this.info.workflowStep property.
  You have to set the modified status again into this property.
  */
  ..
  ..
  }
```

Example:

```
PreWorkflowScripts.replaceRole = function(/* Object */ params)
  {
  /*
  This Example replaces a role handle (params[0]) with another
  Handle (role or user).
*/
  var subs = new Object();
  subs[0] = new Object();
  subs[0].from = params[0];
  subs[0].to = params[1];
  var repl = new Replace(subs);
  this.info.workfloStep = this.info.workfloStep.replace(repl);
  }
```

Post methods:

```
PostWorkflowScripts.<Method name> = function(/* Object */ params)
  {
  ..
  ..
  }
```

Example:

```
PostWorkflowScripts.terminate = function(/* Object */ params)
  {
  /*
  This example terminates the workflow process.
  */
  try
    {
    var content = this.wfProc.pageObj.startTransaction();
    content.Workflow.setValue("");
    this.wfProc.pageObj.commit();
    }
  catch(e)
    {
    Render.logOut(2,"PostWorkflowScripts.terminate: " + e);
    }
  }
```

1.4.12.4. Workflow Conditions

Workflow conditions are explained above in Conditional Workflows.

1.4.12.5. Example Application

The following pages show an example application incorporating attached forms, conditions, **`Pre`** and **`Post`** methods and nested workflows:

Example Application

- Specification
- Solution
- Client Page Template
- Forms Paragraph Template
- Four Forms Pages

1.4.12.5.1. Specification

We want to build an application that can register new clients. We want distinguish between private and enterprise clients. The process should look like this:

- Create new **client page** and submit it into the **Register New Client** workflow.
- Enter common client data. Specify whether client is private or not.
- The form differs depending on the client status (private or enterprise). Enter Private or Enterprise dependent data.
- Enter pricing data and finish up registry.
- A dummy step to terminate the workflow (using a Post method)

1.4.12.5.2. Solution

The solution needs at least two templates:

- Create new client page template
- Forms paragraph template

As well as:

- A **CSD** for the client data.
- A workflow definition which describes the process (plus 2 sub-workflows)
- Four individual forms pages.

The client data CSD looks like this:

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<!DOCTYPE csd SYSTEM "cq:/system/resources/dtd/xmlcsd.dtd">
<csd name="client_data" base="cfcdefault">
<hierarchy_driver name="default" />
<container>
<atom label="Template" driver="default" isBinary="false" />
  <atom label="FirstName" driver="default" isBinary="false" />
  <atom label="LastName" driver="default" isBinary="false" />
  <atom label="PriceList" driver="default" isBinary="false" />

  <atom label="CustomerType" driver="default" isBinary="false" />

  <atom label="NumberOfEmployes" driver="default" isBinary="false" />
  <atom label="BusinessType" driver="default" isBinary="false" />
  <atom label="Locations" driver="default" isBinary="false" />
</container>
</csd>
```

1.4.12.5.3. Client Page Template

The **Create New Client Page** template allows the user to enter a client name. A new client page is created and put into a workflow after submitting the form and automatically forwarded to the form of the first step if a form is attached. The code might look as follows:

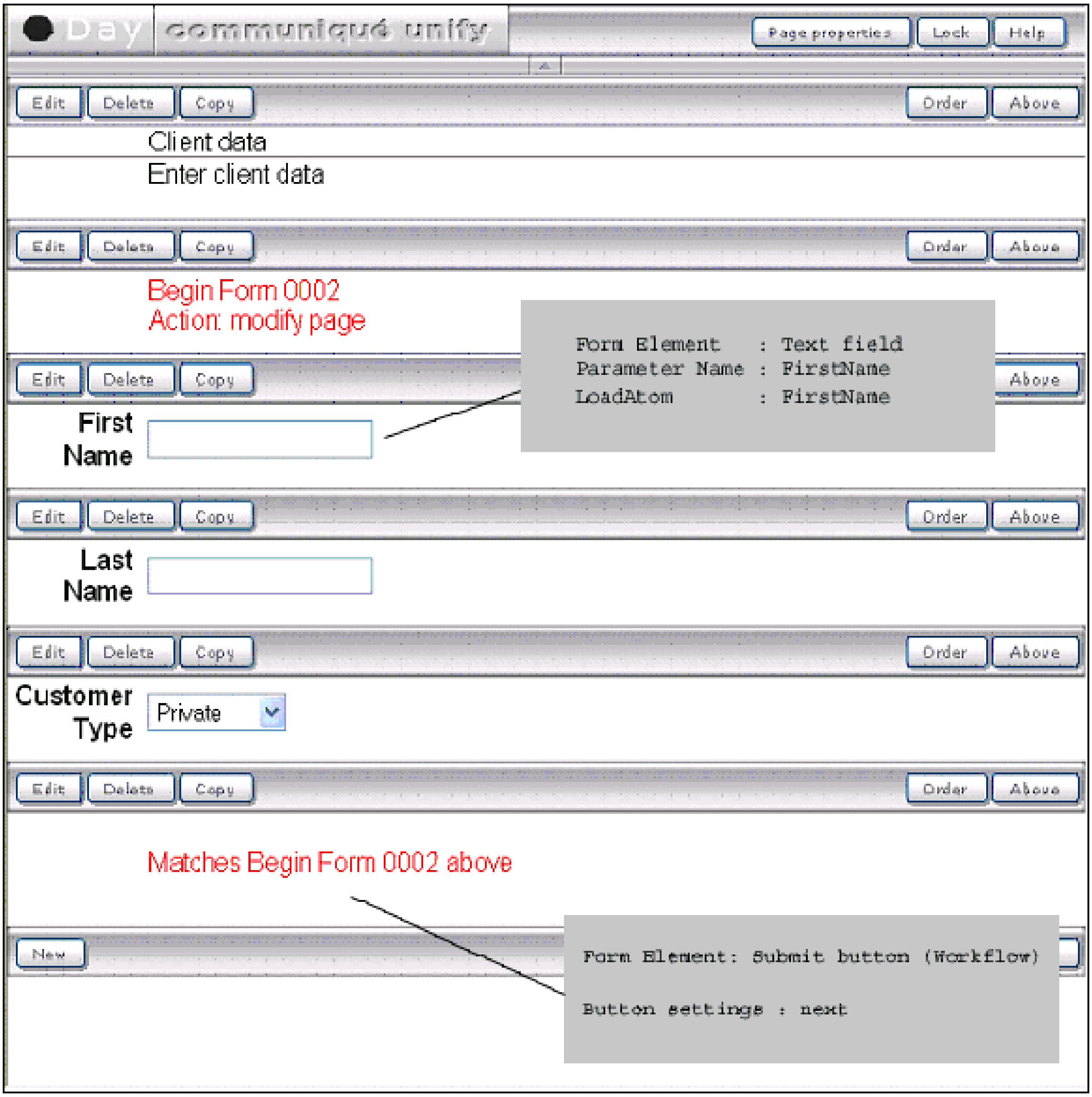
```
<%
var clientName = request.input.clientName[0];
if(clientName)
  {
  try
    {
// create page
    var newClient = ticket.createPage("/etc/clients", "client_data", clientName, null);
    // start workflow
    var wfProc = new WorkflowProcess();
    wfProc.pageObj = newClient;

    var startProps = new Object();
    startProps.workflow = "@" + "/etc/workflows/register_client";
    startProps.user = actuser.getHandle();

    wfProc.startProcess(startProps);

    // forward to first form in workflow
    var wfSplit = newClient.getAtom("Workflow").toString().split("@");
    var step = wfProc.getStep(wfSplit[1]).step;
    var attachedForm = step.AttachedForm.toString();

    var url = CFC.externalizeHref(actpage.getHandle() + ".html");
    if(attachedForm && ticket.hasContentPage(attachedForm))
      {
      url = CFC.externalizeHref(attachedForm + ".html") + "?Show=1&WorkflowState=";
      url += newClient.getAtom("Workflow").toString() + "&DataPage=";
      url += newClient.getHandle() + "&" + CFC.Controls.CacheKiller(1);
      }

    // show either next form or current page (if no attached form is found)
    %><script>
      window.location.href="<%= url %>";
    </script><%
    }
  catch(e)
    {
    %>failed to create client page!<%
    }

}
%>
<html>
  <head>
    <title>Client Manager</title>
  </head>
  <body style="font-family:Arial;background-color:#ffffff">
      Client Manager (register new client)
      <form action="<%= CFC.externalizeHref(actpage.getHandle() + ".html") %>">
      Enter client name:<br>
      <input name="clientName"><br><br>
      <input type="submit" value="Start Task" >
    </form>
  </body>
</html>
```

1.4.12.5.4. Forms Paragraph Template

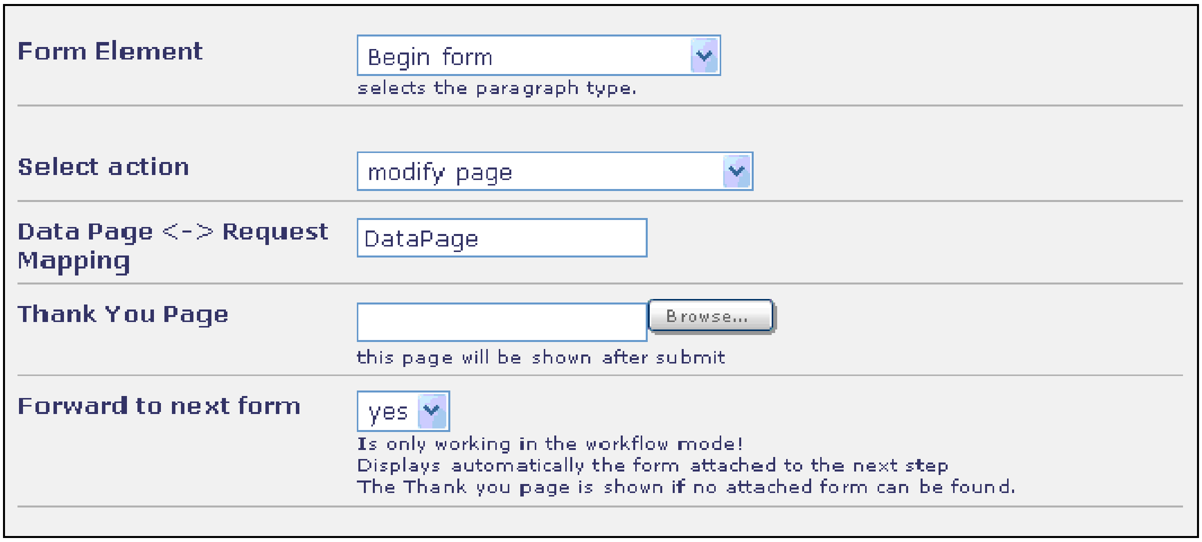
The **Forms Paragraph** template is in principal the same as the maintemplate template of the playground example application.

1.4.12.5.5. Four Forms Pages

The 4 forms pages look as follows:



The **`Load Atom`** property contains the atom name where the value is stored. If a user moves back to a previous workflow step instead of to the next one, the previously entered values would appear in the input fields.
All forms have the same action specified:



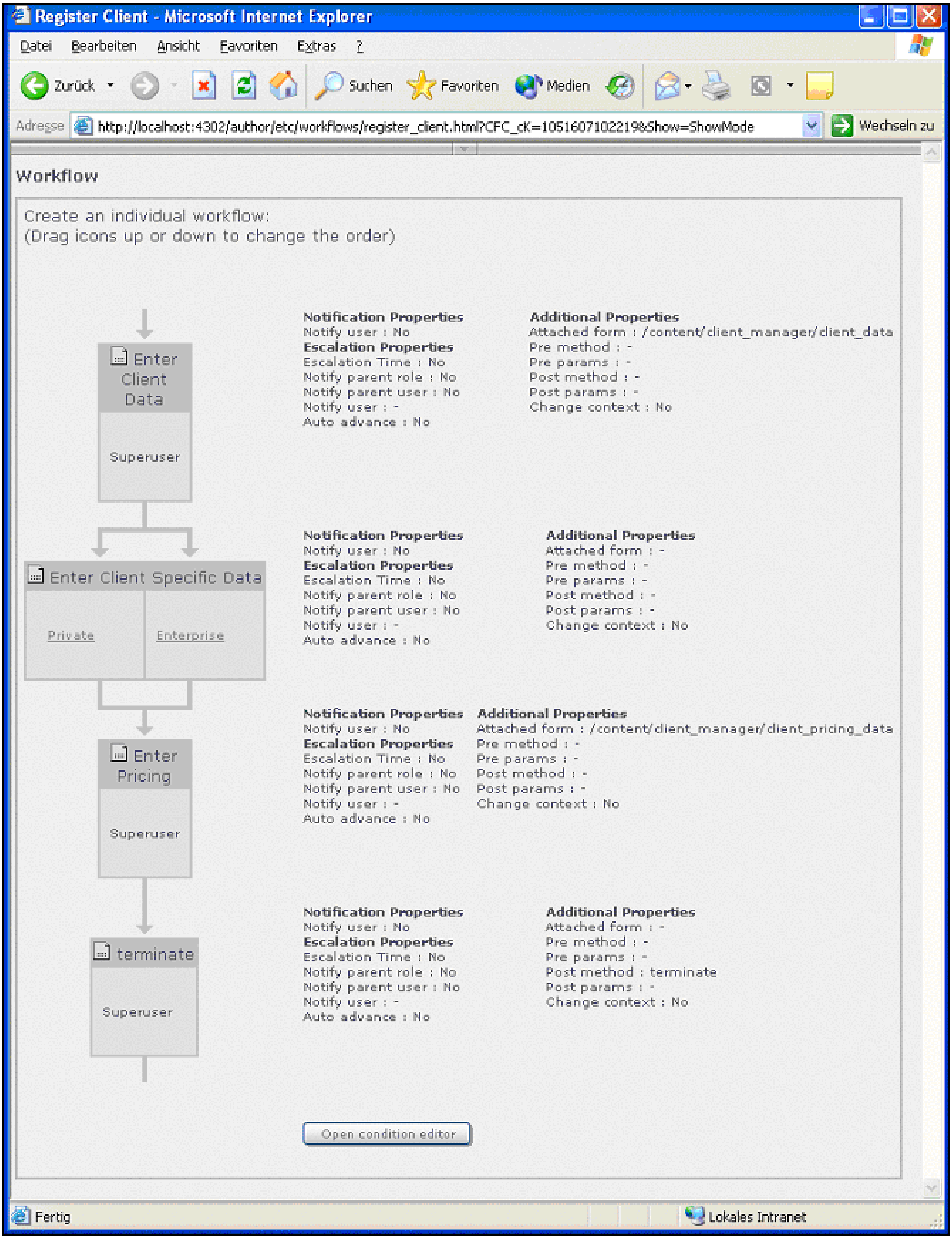
The **`Modify Page`** action can read and save data as well as cooperate with workflow processes.

Data Page to Request mapping:
This property defines the field in the request input which holds the handle of the data container. This allows the forms elements to access the atom named in the **`Load Atom`** property and save data.

Thank You Page:
That’s the page which is displayed after submitting the data.

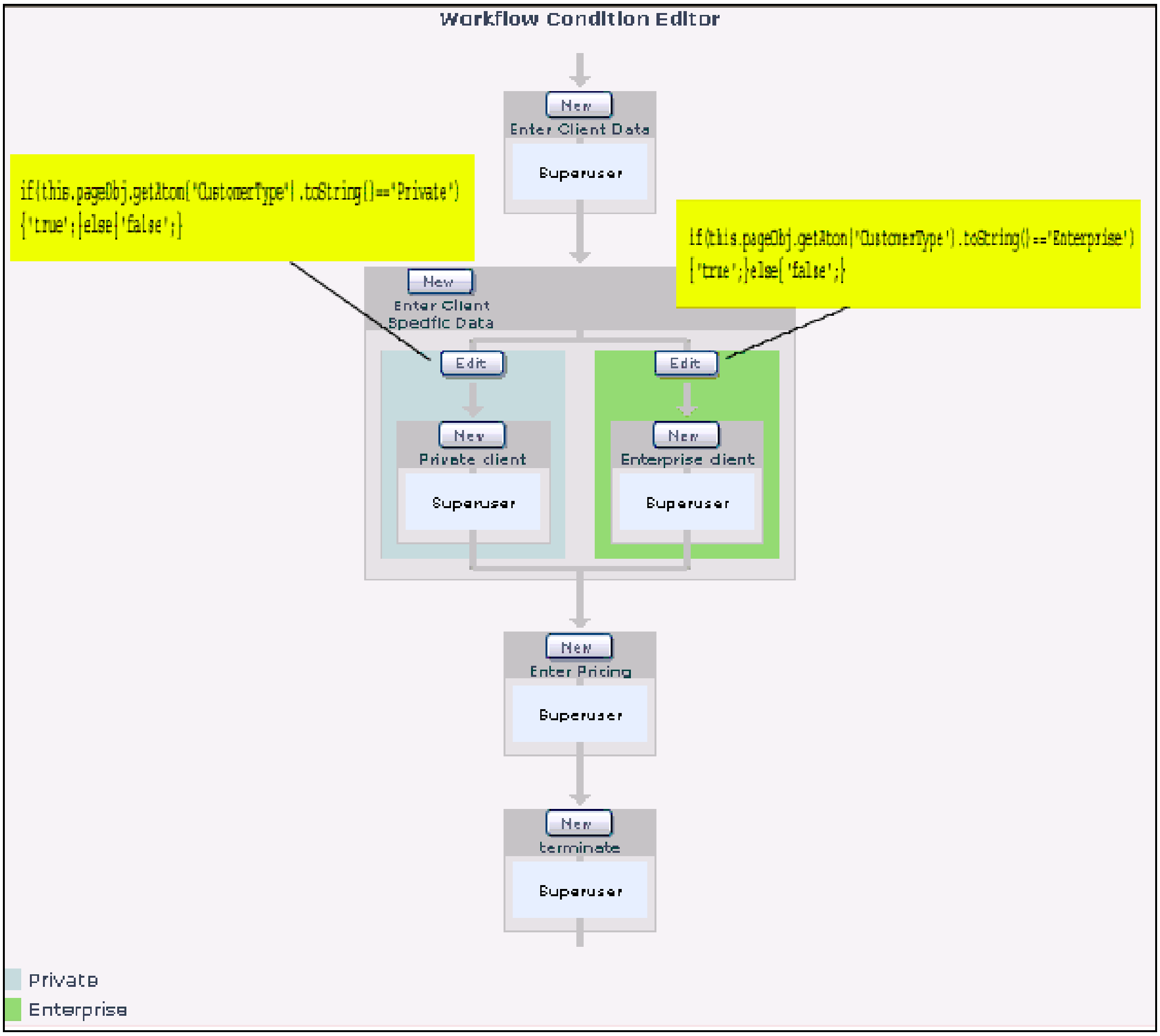
Forward to Next Form:
The forms action, after performing its normal activity, tries to forward to the form page of the next step if one exists.

The workflow process looks as follows:



The **Enter Client Specific Data** step has two nested workflows assigned. Both are single step workflows. The single step has a forms page attached. Doing so makes it possible to have a separate forms page for parallel steps.

Because one wants to display a different form in the **Enter Client Specific Data** step depending on the customer type (private or enterprise), one needs to define two conditions to control this behaviour:



The fourth step is just a dummy step to terminate the workflow using the **`Post`** method. The example just terminates the workflow and does nothing else. It is possible to add other functionality, for example, notifying someone about the termination, starting another workflow under special circumstances…and so on.

The Post method looks like this:

```
PostWorkflowScripts.terminate = function(/* Object */ params)
{
  /*
  This example terminates the workflow process.
  */
  try
```

```
  {
    var content = this.wfProc.pageObj.startTransaction();
    content.Workflow.setValue("");
    this.wfProc.pageObj.commit();
  }
  catch(e)
  {
    Render.logOut(2,"PostWorkflowScripts.terminate: " + e);
  }
}
```

1.5. User Management

In the **user view** of the CMS you can manage all users that should have access to your project. Basically there are two types of users depending on the access rights given to them:

- Authors: A user that has the necessary rights to **modify the content pages** accessible in the site view and eventually replicate it to other instances is called an author or content manager.

- Users: If you have at least two Communiqué instances forming an authoring and a publish instance and you have areas in your project that enforce authentication you can manage these user accounts in the same view on the authoring instance and replicate them to the publish instance.

There are three special types of abstract or technical users that have special tasks:

- Replication Delivery Agent: This agent represents one **subscriber**. This means whenever you replicate a content page, user or package, then all agents that have **read** right on the replicating content will take it and send it to the subscriber that has been defined in the agents properties. He inherits the rights from parent users like a normal user.

- Replication Receiver Agent: An abstract user that is the receiver of content replications. To be able to update received content in the content repository he must have **read, write, copy and delete** rights for the destination locations, since he needs to read existing pages, update pages create new ones and delete them. He inherits the rights from the parent user like a normal user.

- Access Control List: Used to generate ACLs. In this way you can edit content access rights that later may be used by project templates. The CMS itself uses two ACL definitions, `/system/pre` and `/system/post`, to define the general pre and post rights of all users.

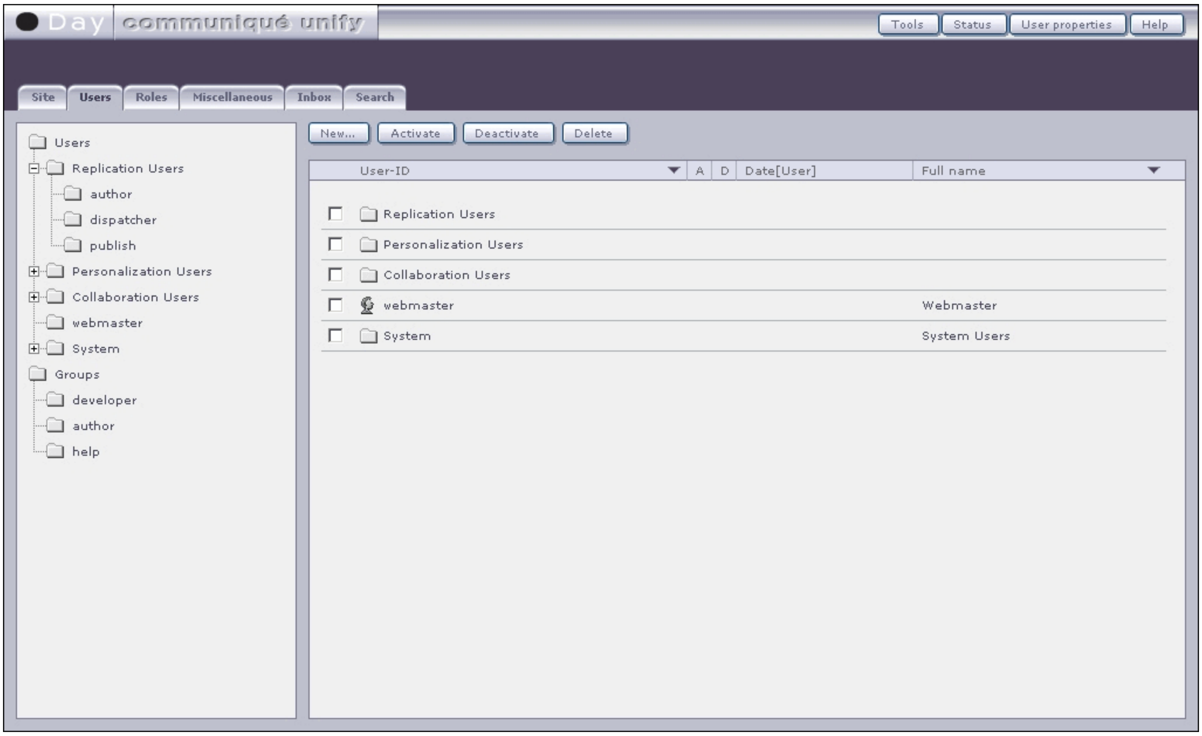
User Management

- User Management GUI
  - User/User Group Listing
- User Management Functions

- Creating New Users
- Editing User Rights and Properties
- Activation / Replication of Users
- Deactivating Users
- Deleting Users
- User Group Management Functions
  - Creating new User Groups
  - Editing User Group Properties
  - Activation/Replication of User Groups
  - Deactivating User Groups
  - Delete User Groups
- Impersonation
  - Enabling Impersonation
  - Granting Impersonation Permission
  - Impersonating Another User

1.5.1. User Management GUI

All types of users and user groups are managed on the **users** tab of the CMS console:

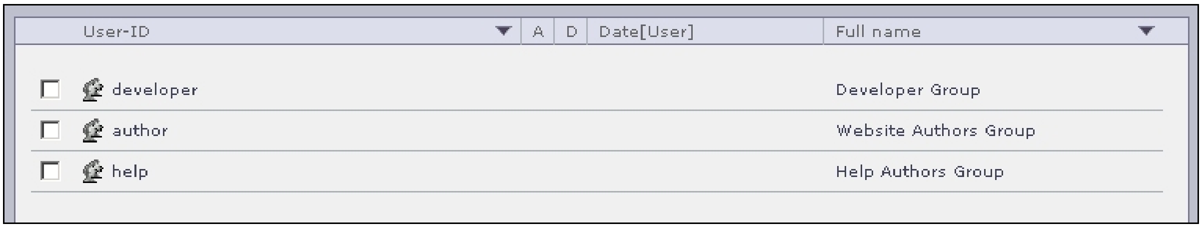


GUI Element	Description
User Tree	The user tree lists all user types. The **hierarchical order** of the users in the tree is **important** since each user (except for the ACL user) inherits the **deny** rights from his ancestors. This means that a sub user can never have more rights then his direct parent user. For organizational purposes you can add user folders to the tree to organize your users. The topmost user in the hierarchy (not visible in the tree) is the **superuser**. He serves as the master user of the system and has the maximum rights.
User Group Tree	The user group tree lists all user groups. The **hierarchical order** of the user groups is for **organizational purposes** only, no rights are inherited from one to an other.

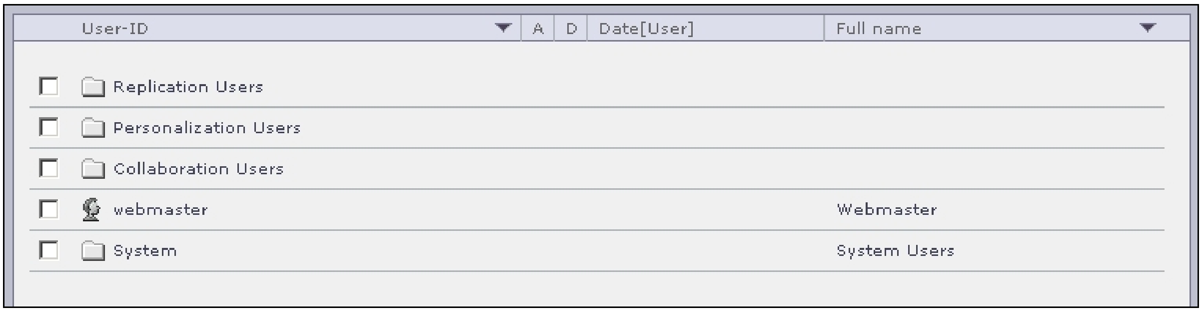
User Management Actions	A series of user / user group related management actions: - **New**: Create a new user or user group. - **Activate**: Replicate the user or user group to connected subscriber(s). - **Deactivate**: Delete the user or user group on the connected subscriber(s). - **Delete**: Deletes the Users or user group on the current System and all connected subscribers(s).
User / User Group Listing	The user/user group listing pane lists all children of the selected node in the user or user group tree. For each user or user group a number of a number of user/user group related information is shown.

1.5.1.1. User/User Group Listing

If a node in the user group tree is selected, all subgroups are listed in the listing pane:



If a node in the user tree was selected, all subuser and user folders are listed instead:



The information shown for users and user groups is the same:

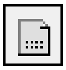
GUI Element	Description
Checkbox	User/user group management actions are executed on the checked items.
User/User Group Name	User name or user group ID.
Activate/Deactivate Indicators	A user or user group can have three different activation status: **Item has never been activated or deactivated**: In this case no indicator is set. **Item has been activated**: A green square in the **A** row will be visible. **Item has been deactivated**: A red square in the **D** row will be visible.
Activate/Deactivate Date and User	Date of last activation/deactivation and name of the user that performed the action.
Full User/User Group Name	The full name or short description defined for the user or group.

There are different icons used for the different type of users:

A standard user.

A delivery agent.

A receiver agent.



An ACL user.

A user folder.

1.5.2. User Management Functions

The user management functions are located in the **user view** above the listing pane:

What actions are available to the currently logged in author depends on the rights given to him.

All actions are performed on the users selected in the listing that are selected by their checkbox:

Adds a new user to the user listing.

Replicates the selected user(s) to the defined subscribers.

Deactivates the selected users(s) on the defined subscribers.

Deletes the selected users(s) from the content repository.

User Management Functions

- Creating New Users
  - New User
  - New ACL User
  - New Replication Delivery Agent

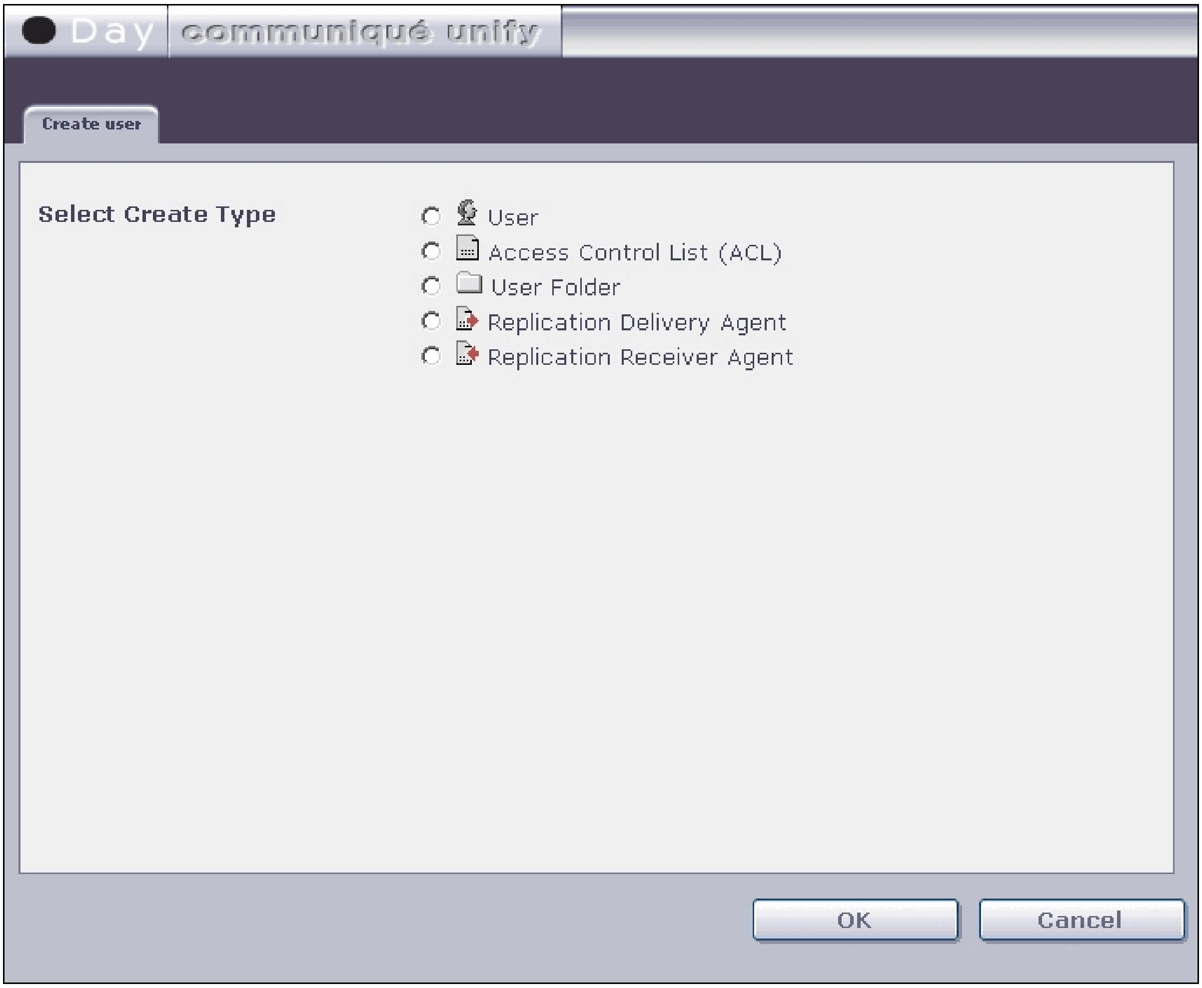
- New Replication Receiver Agent
- New User Folder
- Editing User Rights and Properties
  - User Properties
  - ACL User Properties
  - Replication Delivery Agent Properties
  - Replication Receiver Agent Properties
  - User Folder Properties
  - Editing Page Access Rights
- Activation / Replication of Users
- Deactivating Users
- Deleting Users

1.5.2.1. Creating New Users

.

To create a new user or user folder, first select the branch where the new item should be inserted. This is done by selecting the new item's **parent** in the **user tree**, so that the new item's **siblings** are listed in the user listing.

Then click the **`New#`** button. Communiqué displays the **`Create User`** dialog:



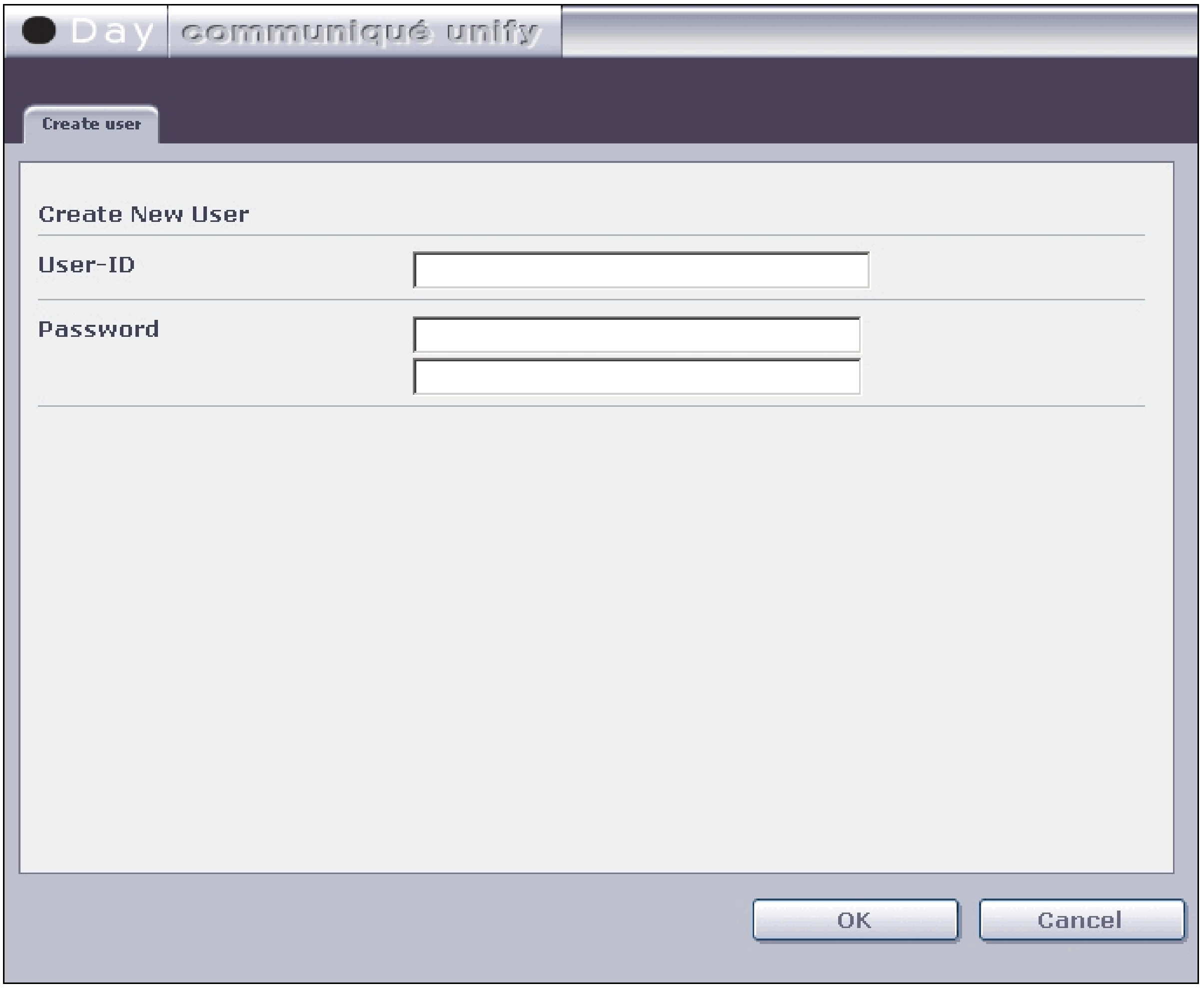
On this first dialog you have to select the type of user you want to add (please note that the user group is not a valid option for the user tree).

User Type	Description
User	A standard user. If the user is given rights to edit the content he is also often referred to as author.

Access Control List	Used to generate ACLs. In this way you can edit content access rights that later may be used by project templates. The CMS itself uses two ACL definitions, `/system/pre` and `/system/post`, to define the general pre and post rights of all users.
Replication Delivery Agent	This agent represents one **subscriber**. This means whenever you replicate a content page, user or package, then all agents that have **read** right on the replicating content will take it and send it to the subscriber that has been defined in the agents properties. He inherits the rights from parent users like a normal user.
Replication Receiver Agent	An abstract user that is the receiver of content replications. He can only write received content into the content repository if he has at least **write** rights for the destination location. He inherits the rights from the parent user like a normal user.
User Folder	Its not a user but a simple folder node that you can use to organize your users.

1.5.2.1.1. New User

If you selected to create an new user you will get the following dialog:



GUI Element	Description
User-ID	The user name used for login. the user ID may not contain blanks or special characters.
Password	The users password. You must enter it twice.
OK	Creates the new user and closes the dialog.
Cancel	Aborts the user creation process and closes the dialog.

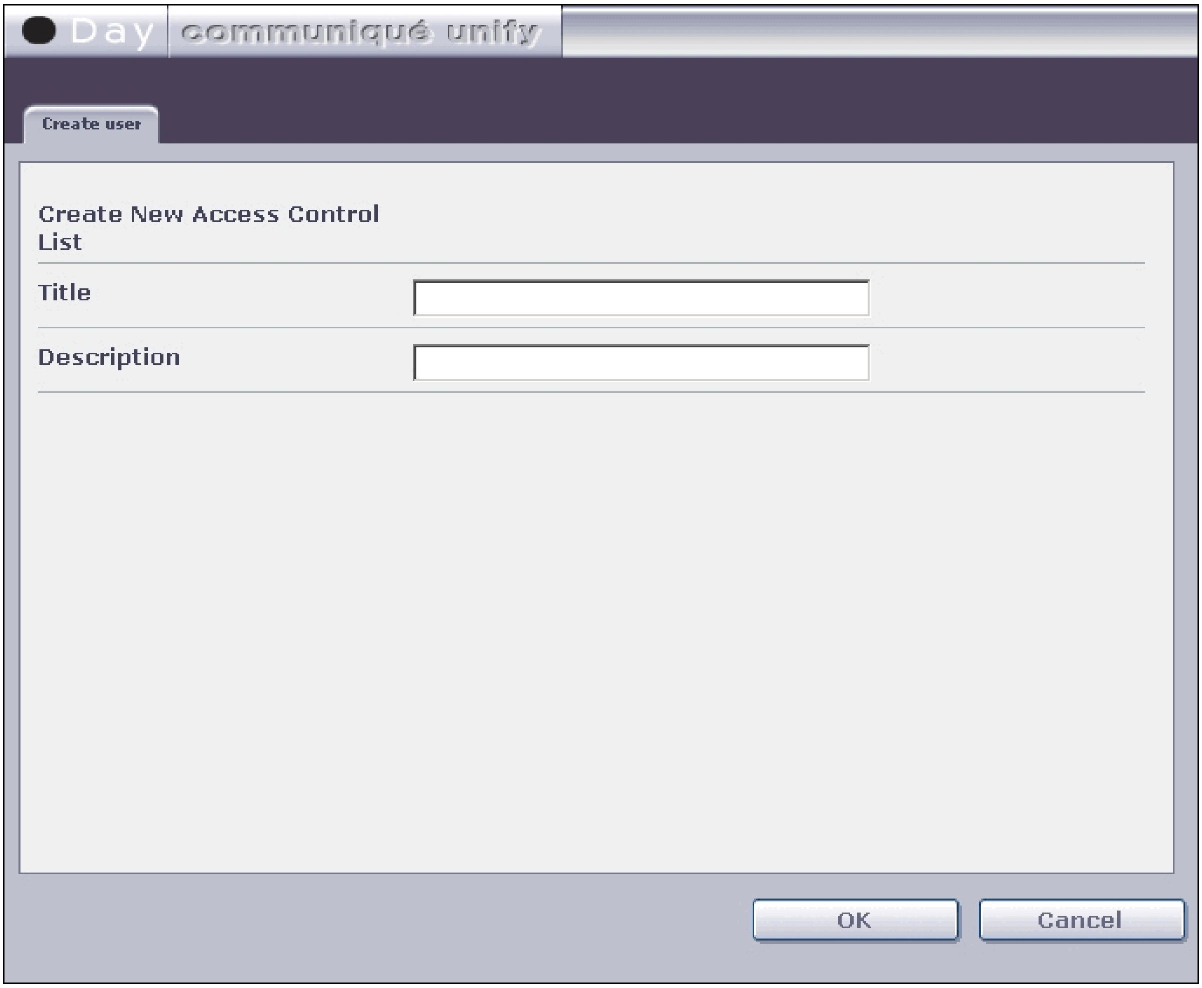
To edit the new users properties and access rights you must click on its icon in the user listing.

1.5.2.1.2. New ACL User

The ACL user is not a real user since he does not inherit any rights from the parent user. ACL Users are simply a tool to create Access Control Lists that must be manageable through an author.

This ACL can then be used inside templates to evaluate some access rights algorithms.

There are two ACL users that are used by the CMS System itself, the **/system/pre** and **/system/post** ACL Users. See the Delivery Module for more details.



GUI Element	Description
Title	The Title shown in the user Tree.
Description	The Description to be shown under **full name** in the user listing.
OK	Creates the new ACL user and closes the dialog.

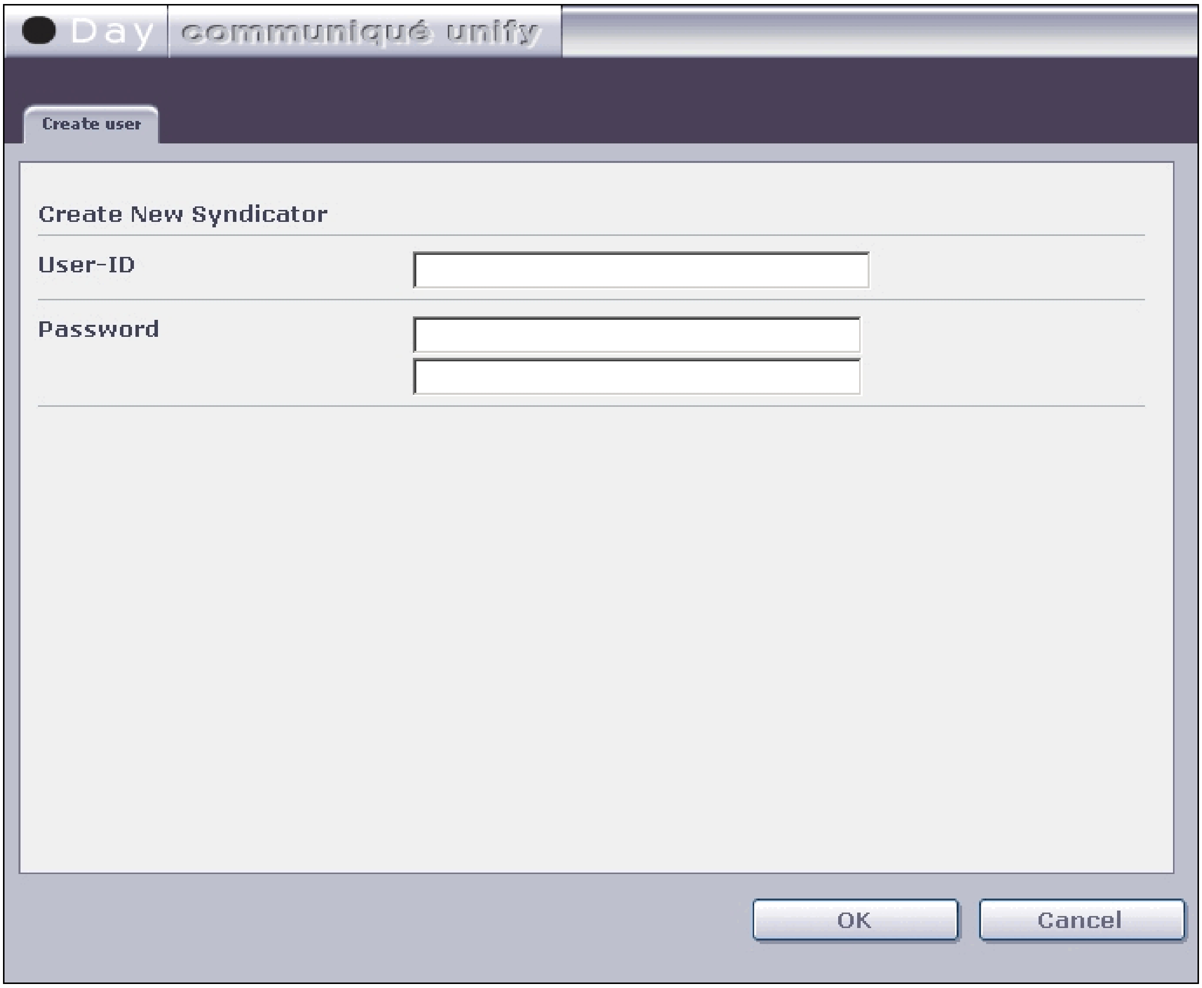
Cancel	Aborts the ACL user creation process and closes the dialog.

To edit the new ACL users properties you must click on its icon in the user listing.

1.5.2.1.3. New Replication Delivery Agent

The delivery agent is a special case of a normal user because it stores additional information about a subscriber for content replication actions.

So each time a replication request is made, all delivery agents that have read rights on the replicated content will take it and send it to its defined subscriber.



GUI Element	Description
User-ID	The name of the agent. The user ID may not contain blanks or special characters.
Password	The agents password. You must enter it twice to make sure it is correct.
OK	Creates the new agent and closes the dialog.

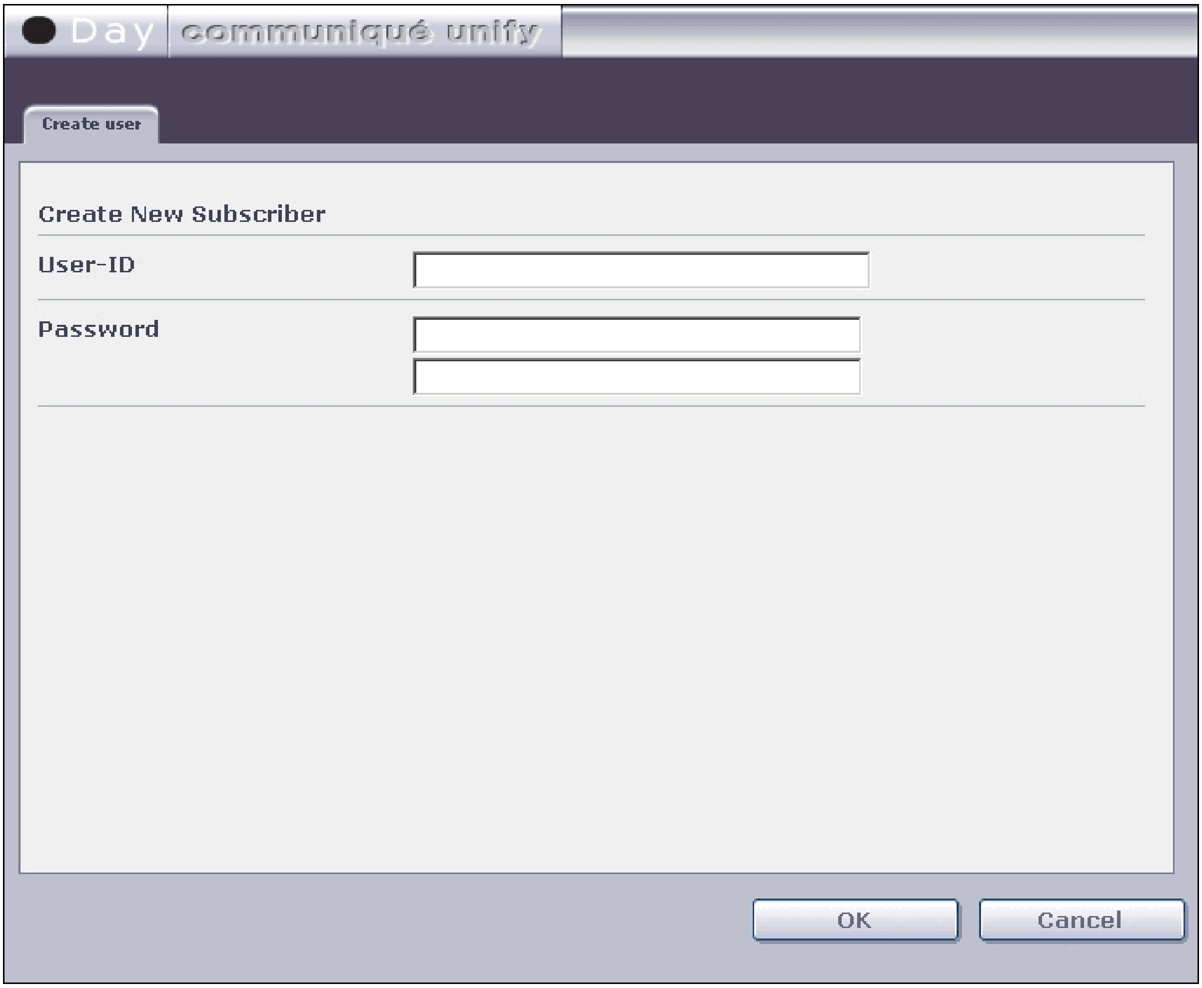
Cancel	Aborts the agent creation process and closes the dialog.

To edit the new delivery agents properties and access rights you must click on its icon in the user listing.

1.5.2.1.4. New Replication Receiver Agent

The Receiver Agent is only semantically different from a normal user. The idea is the if your system is a subscriber to an external source that feeds content into your content repository you need to give the sender a username and password to login on your system.

Since you don't want to use your own or someone elses user account you create a abstract user, a receiver agent.



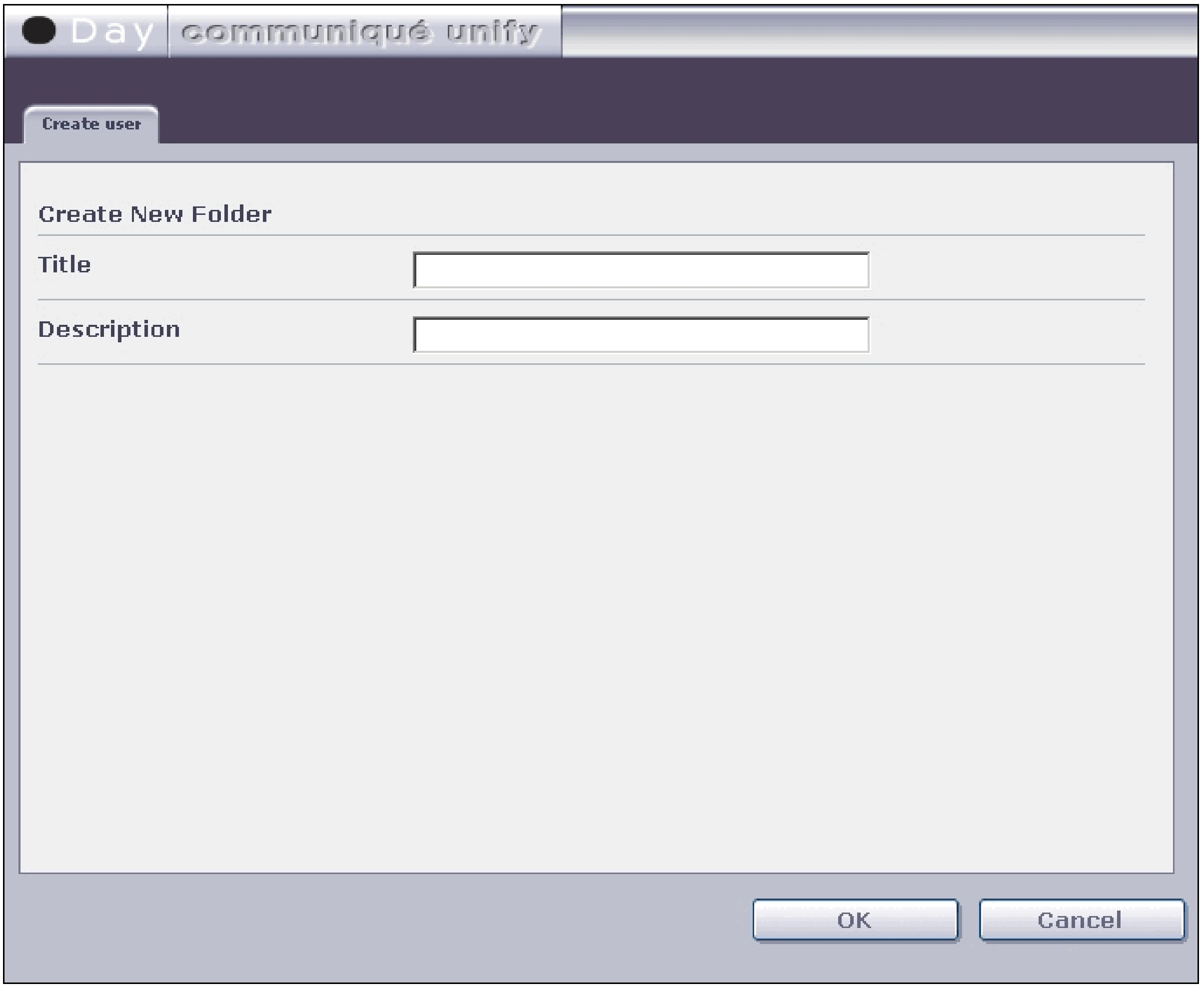
GUI Element	Description
User-ID	The name of the agent. The user ID may not contain blanks or special characters.
Password	The agents password. You must enter it twice to make sure it is correct.
OK	Creates the new agent and closes the dialog.

Cancel	Aborts the agent creation process and closes the dialog.

To edit the new receiver agents properties and access rights you must click on its icon in the user listing.

1.5.2.1.5. New User Folder

The user folder is just a folder or logical node that you can use in your user tree to organize your users.

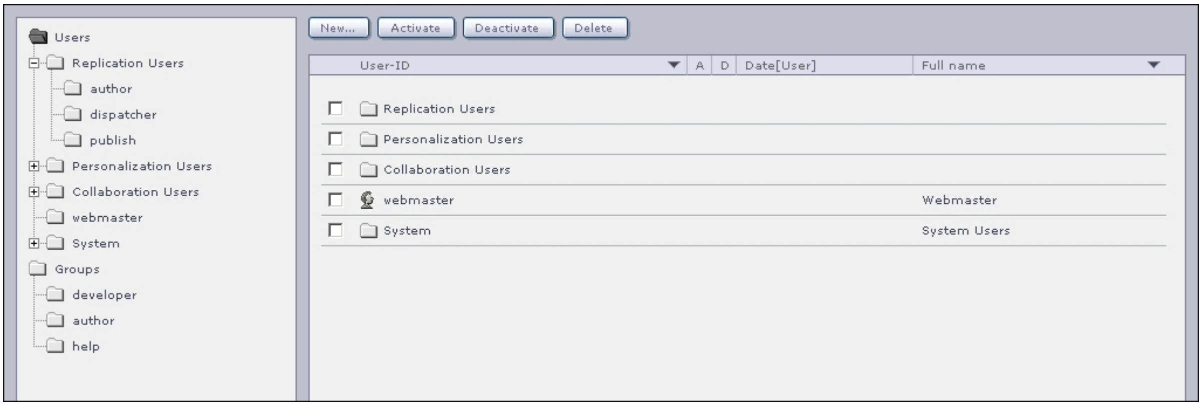


GUI Element	Description
Title	Folder Name.
Description	Short description for the folder.
OK	Creates the new folder and closes the dialog.
Cancel	Aborts the user folder creation process and closes the dialog.

To edit the user folders properties you must click on its icon in the user listing.

1.5.2.2. Editing User Rights and Properties

To edit the properties of a user or user folder you must click on its icon in the user listing to open the user properties dialog:



Which properties are editable for a particular user or user folder depend on its type.

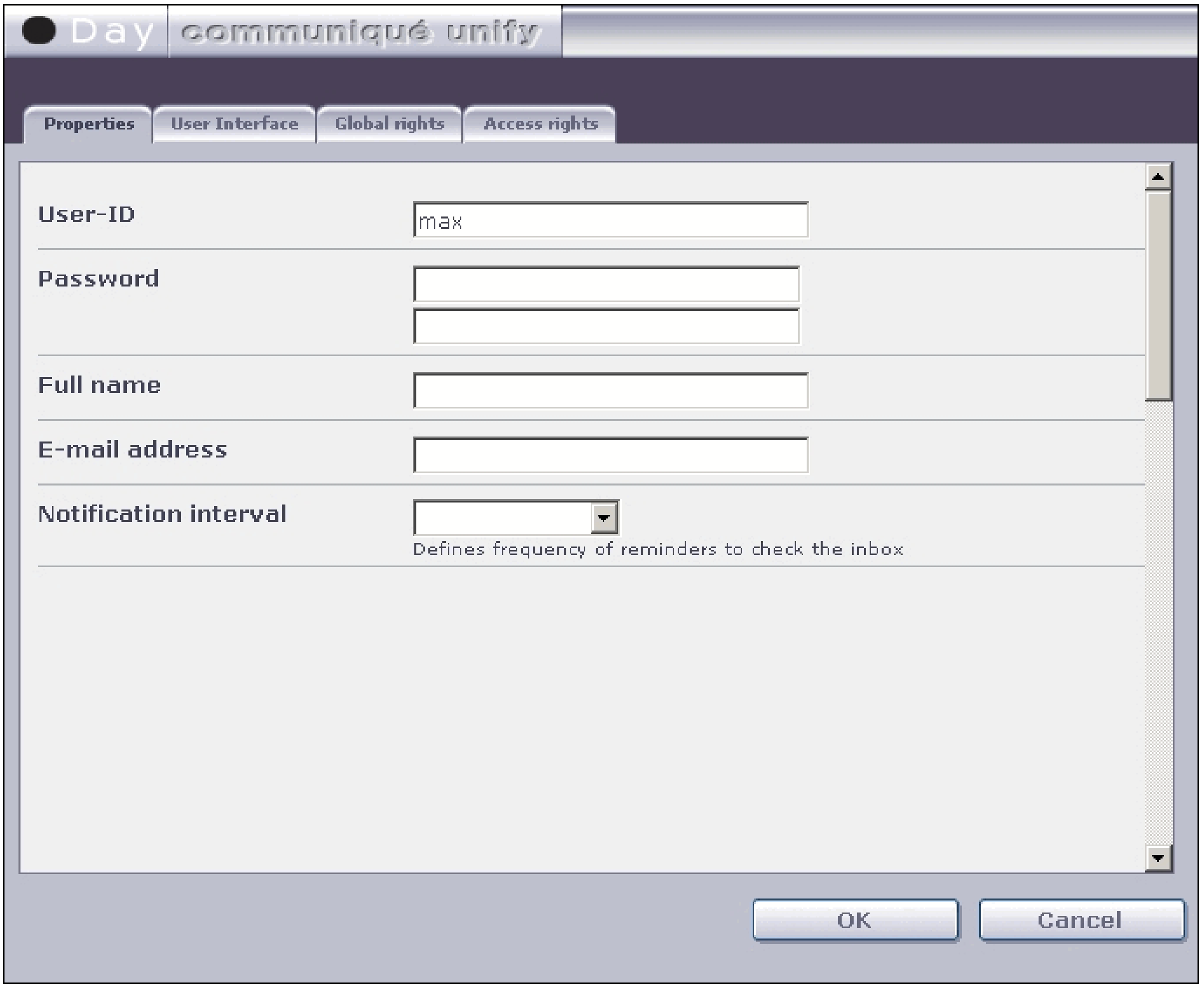
Editing User Rights and Properties

- User Properties
- ACL User Properties
- Replication Delivery Agent Properties
- Replication Receiver Agent Properties
- User Folder Properties
- Editing Page Access Rights

1.5.2.2.1. User Properties

The user dialog has four different tabs.

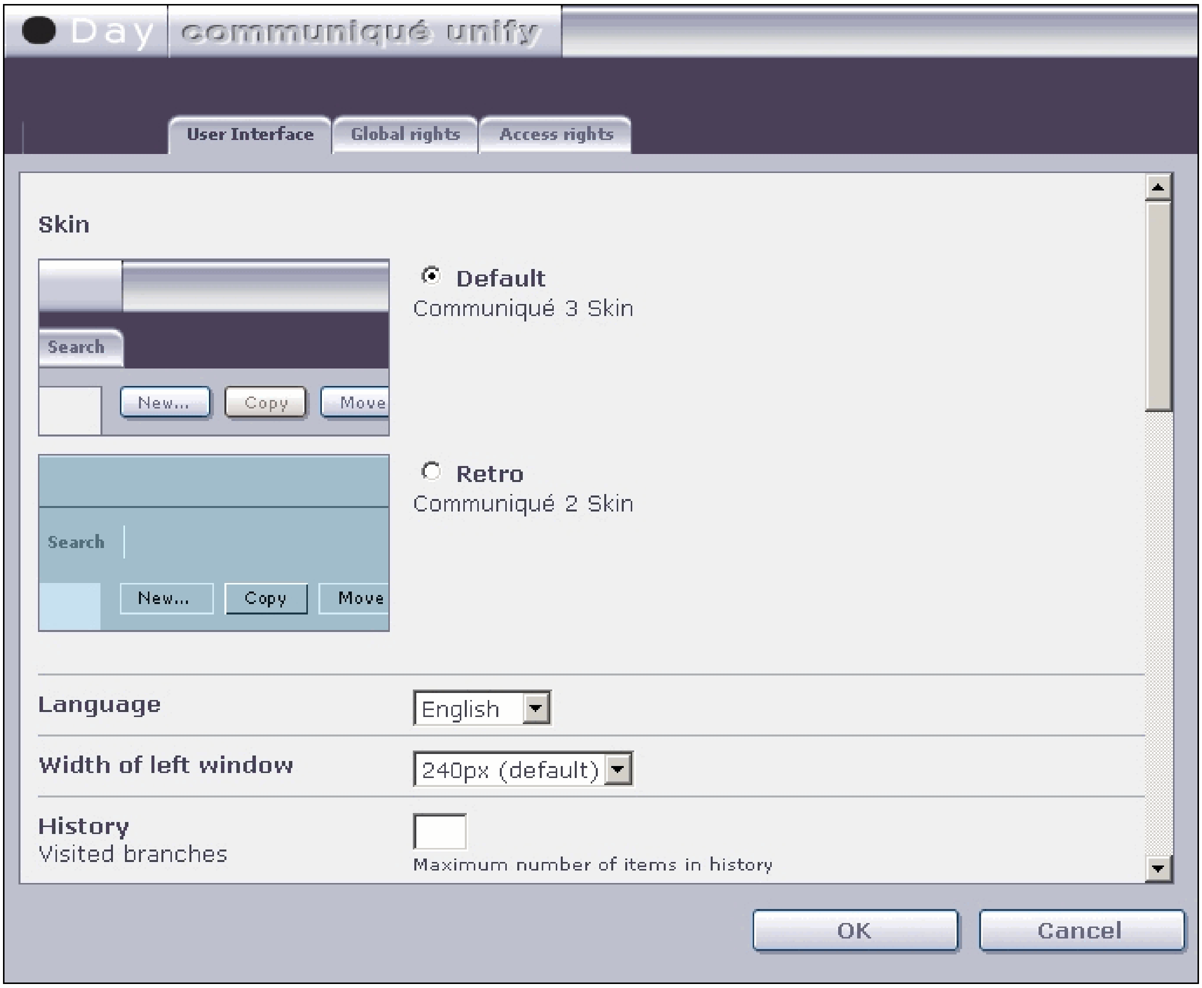
Properties



GUI Element	Description
User-ID	The user's name.
Password	Change password of the user. Note that the password is displayed as a series of asterisks for security. The password must be entered twice in order to verify that it is correct.
Full Name	Enter the full name of the user.

E-mail address	Enter the e-mail address of the user. Note that this entry is mandatory if the user is to receive workflow mail notifications.
Notification interval	Frequency of mail reminders to be sent the user to check the workflow inbox for changes.

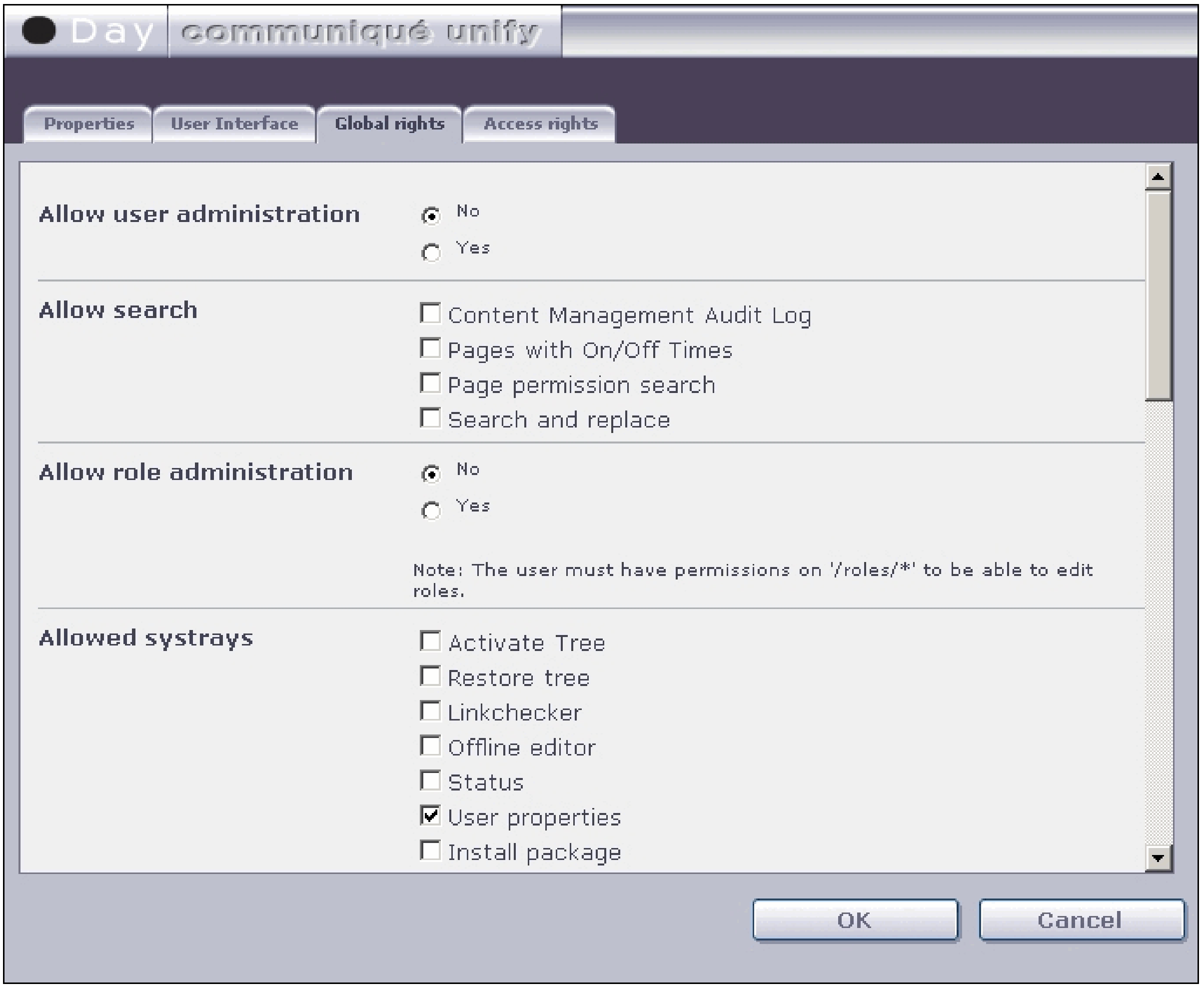
User Interface



GUI Element	Description
Skin	Choose a skin from the options provided: - Default - Retro
Language	Choose a language for the user from the options provided:

	- Deutsch - English - Español - Français
Width of left window	The width of the navigation pane in the site and user view.

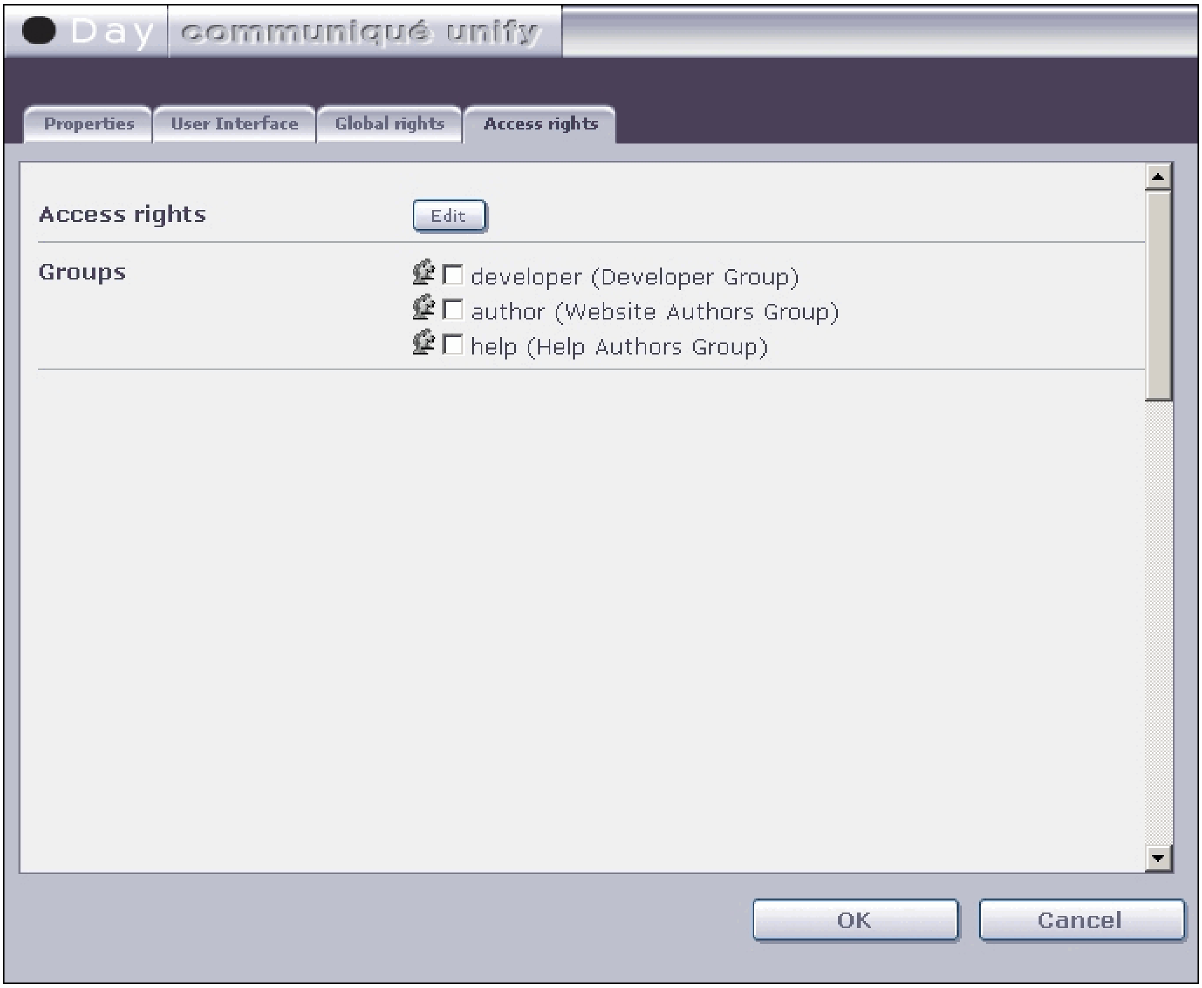
Global Rights



GUI Element	Description
Allow user administration	Yes allows the user to create subusers in the user tree as child of itself.
Allow search	Select the CMS search methods to be made available for the user.

Allow role administration	Yes will allow the user to access and use role administration.
Allowed systrays	Select the Tools to be made available to the user.
Allowed templates	Select the templates that the user is allowed use when create a new content page in the site view.
Allow user to reset workflow	Yes allows the user to restart the workflow regardless of the current workflow state.
Allow user to create MY WORKFLOW	Yes allows the user to create his own workflow.

Access Rights



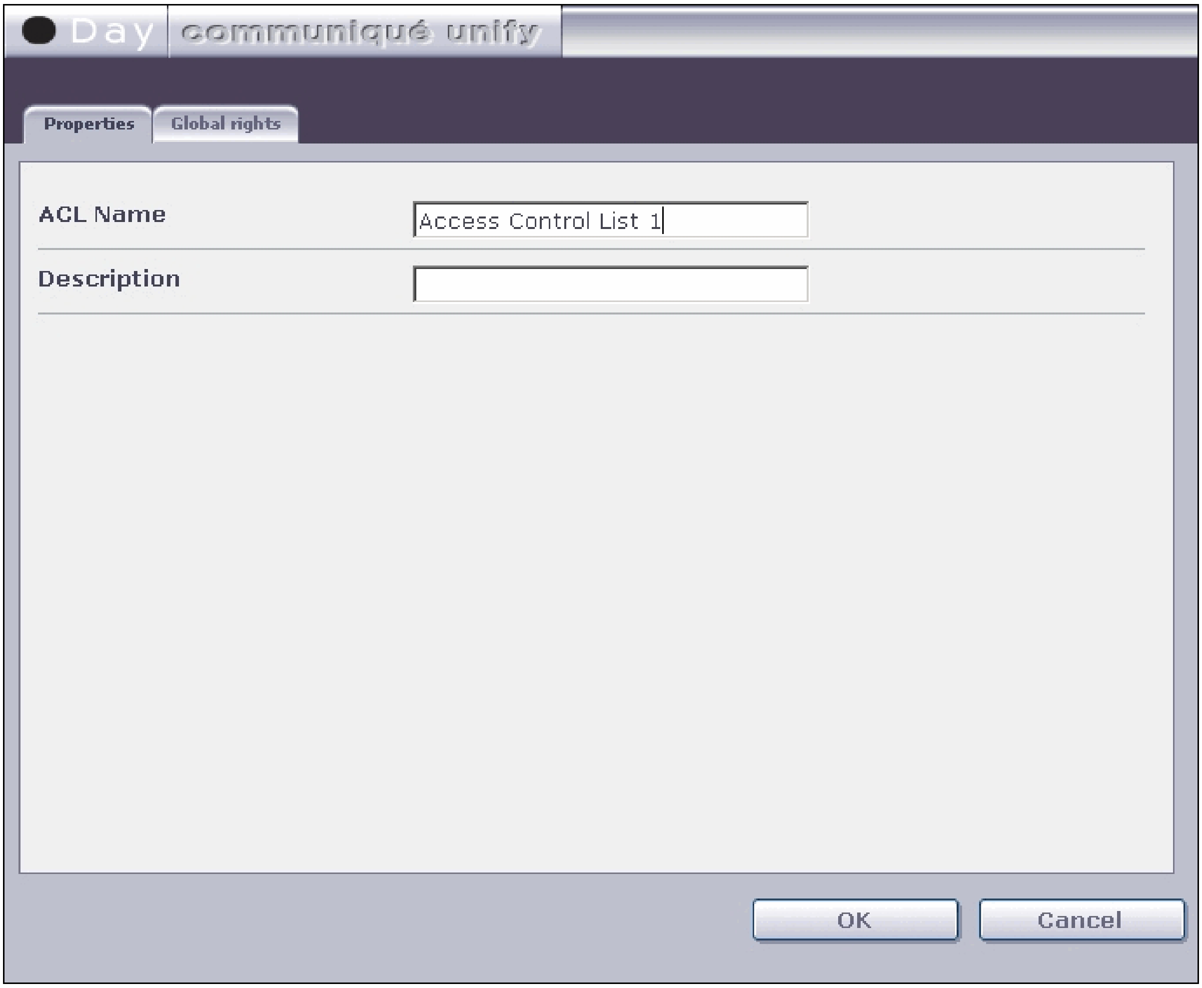
GUI Element	Description
Access rights	Click on the **`Edit`** button to assign access rights to the user.
Groups	Click in the checkbox next to the group(s) to make the user part of that group.

Click on the **`OK`** button to save the properties.

1.5.2.2.2. ACL User Properties

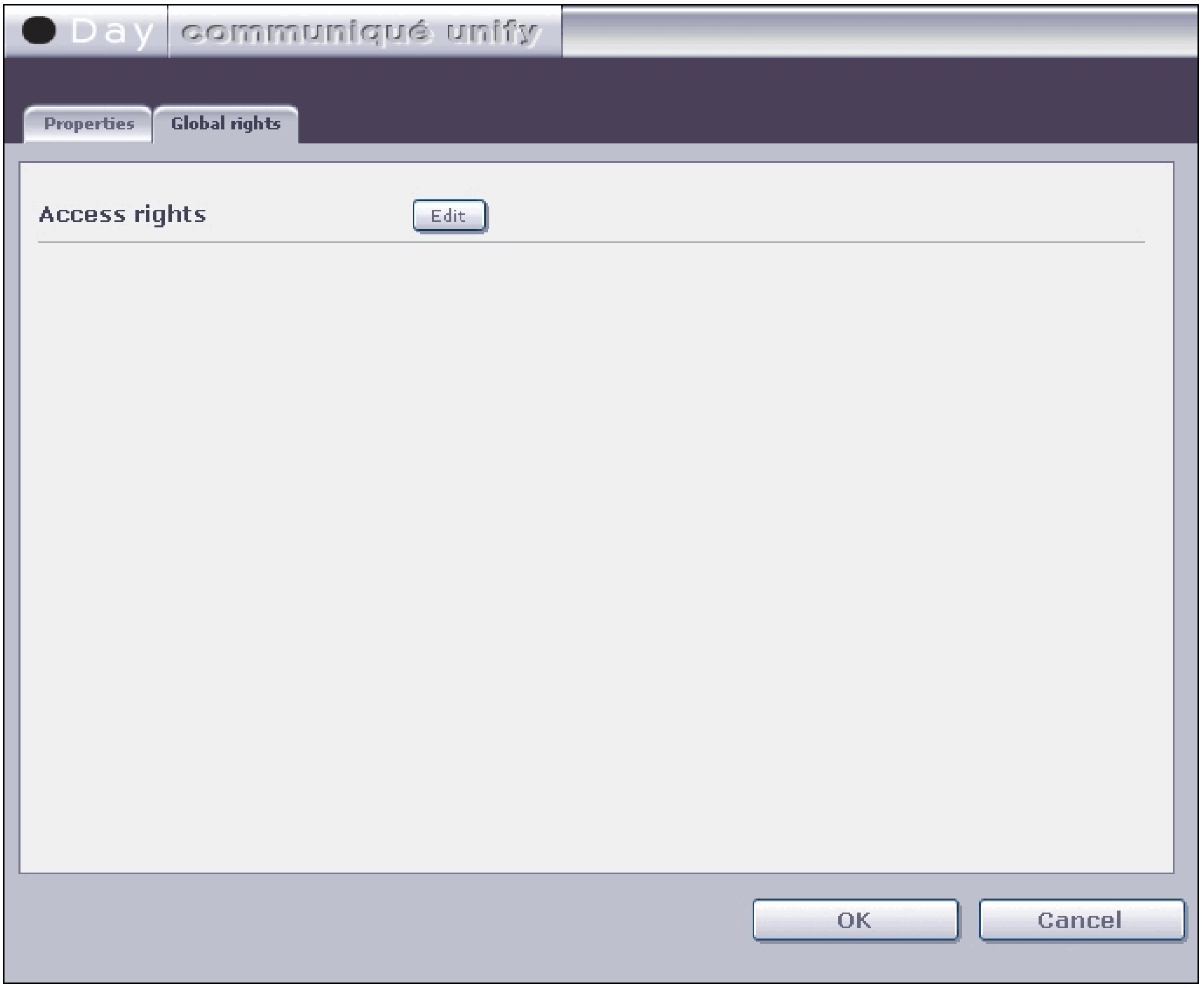
The ACL user properties dialog has two tabs:

Properties



GUI Element	Description
ACL Name	Name of the ACL user that appears in the user tree.
Description	Short description of the ACL user, shown in the user listing.

Global Rights

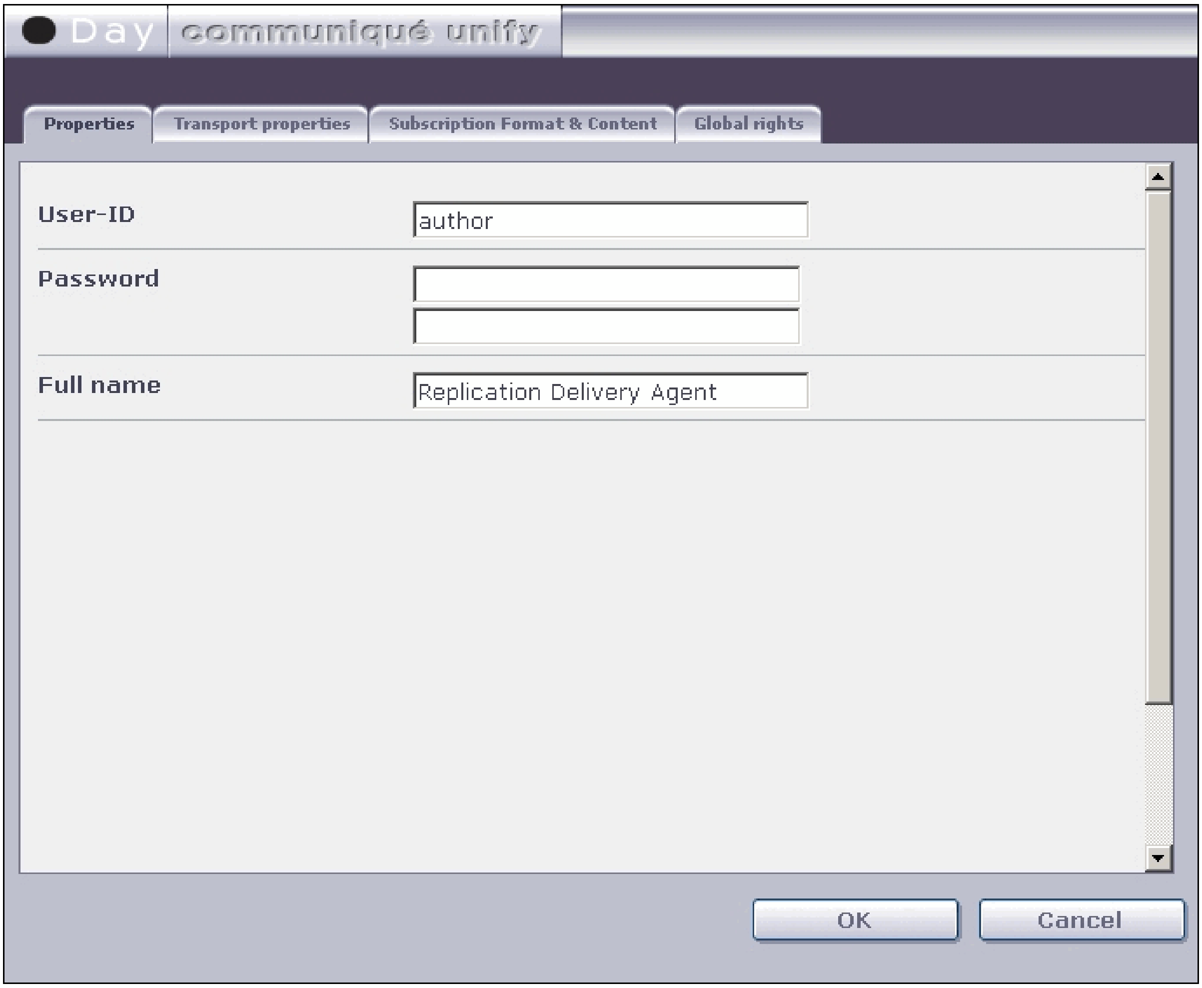


GUI Element	Description
Access Rights	Click on the **`Edit`** button to edit the access control list.

1.5.2.2.3. Replication Delivery Agent Properties

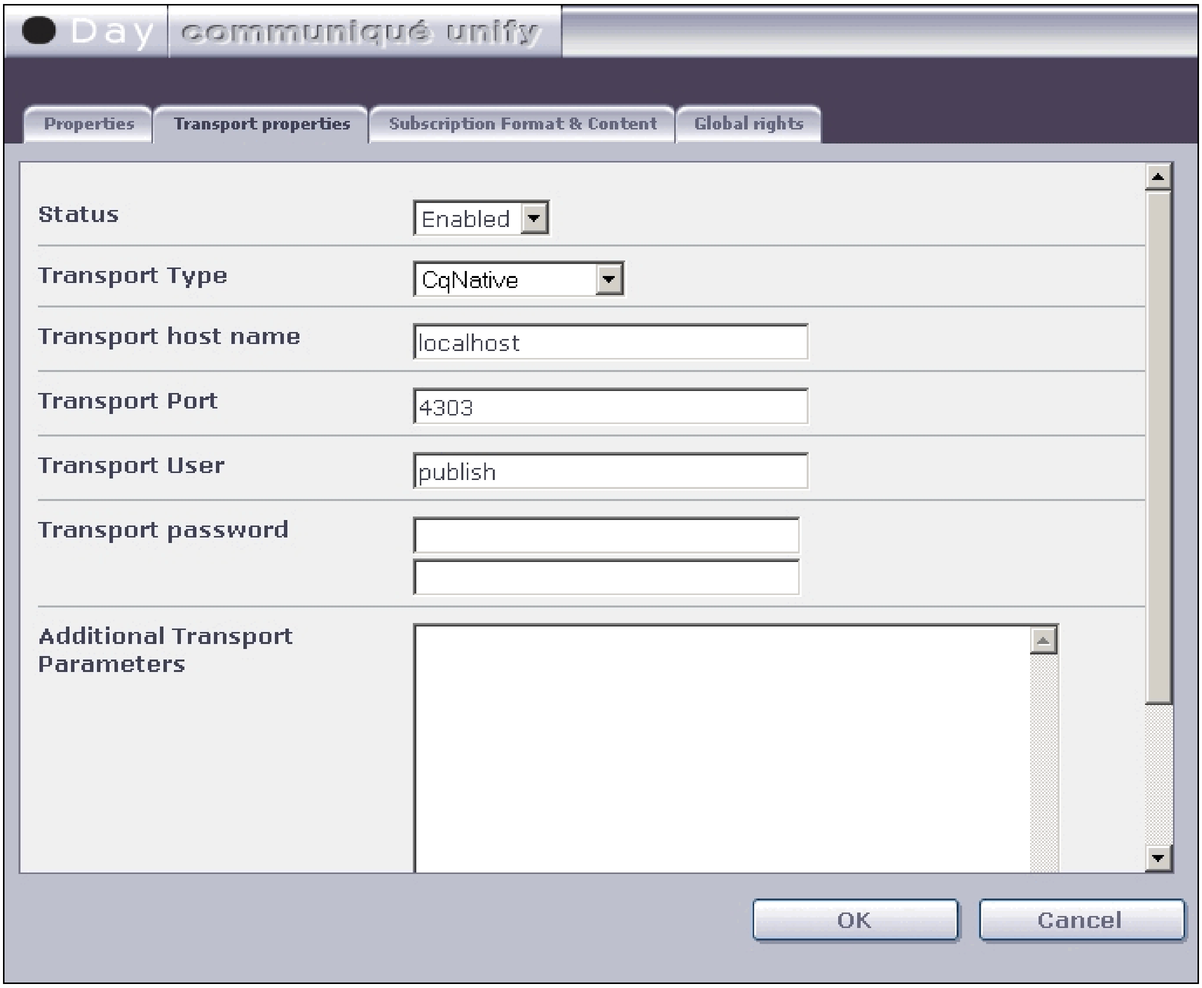
The replication delivery agent properties dialog has four tabs:

Properties



GUI Element	Description
User-ID	The agent name.
Password	Password for the agent. Note that the password is displayed as a series of asterisks for security. The password must be entered twice in order to verify that it is correct.
Full Name	Full name of the agent.

Transport Properties



GUI Element	Description
Status	A delivery agent can be in two different States : - **`Enabled`** : Replication requests get send to the defined subscriber. - **`Disabled`** : The agent is not active. No replication request get send to the defined subscriber.
Transport Type	In this dropdown list the way the content is replicated can be selected : **`CqNative`** : Standard **`HTTP POST`** with additional headers to replicate content to other Communiqué 3 Instances. **`Cq2Compatible`** : Standard **`HTTP POST`** with Communiqué 2.x compatible headers to replicate content to Communiqué 2.x Instances.

	HTTPEvent : A **HTTP POST** will be send with the additional headers, but no content. This is useful if the subscriber is only interested to know that something has changed for example a dispatcher but does not need the content itself. **Mail** : The content is send in a mail using **SMTP**. **FTP** : The content is send using **FTP**.
Transport host name	The **host name**, **mail server** or **ftp server** of the subscriber depending on the transport type selected.

Transport Port	Port at the subscriber to be used for sending. If not set the default ports are used :
	
	`HTTP : 80`
	`FTP : 12`
	`SMTP : 25`

Transport User	Username to authenticate on the subscriber if needed. The mail address if the transport type is set to `Mail`.
Transport password	The password to authenticate on the subscriber if needed.
Additional Transport Parameters	This field can be used by future or project specific transport handlers to add some additional info. None of the standard transport types uses it currently.
Frequency of Delivery	**Immediately**: As soon as a content replication request arrives the content gets replicated to the subscriber **Every 10 Minutes**: All incoming content replication get queued an executed together every 10 minutes. **Once an hour**: All incoming content replication requests get queued an executed together once an hour. **Once a day**: All incoming content replication request get queued an executed together once a day. **Weekly**: All incoming content replication requests get queued an

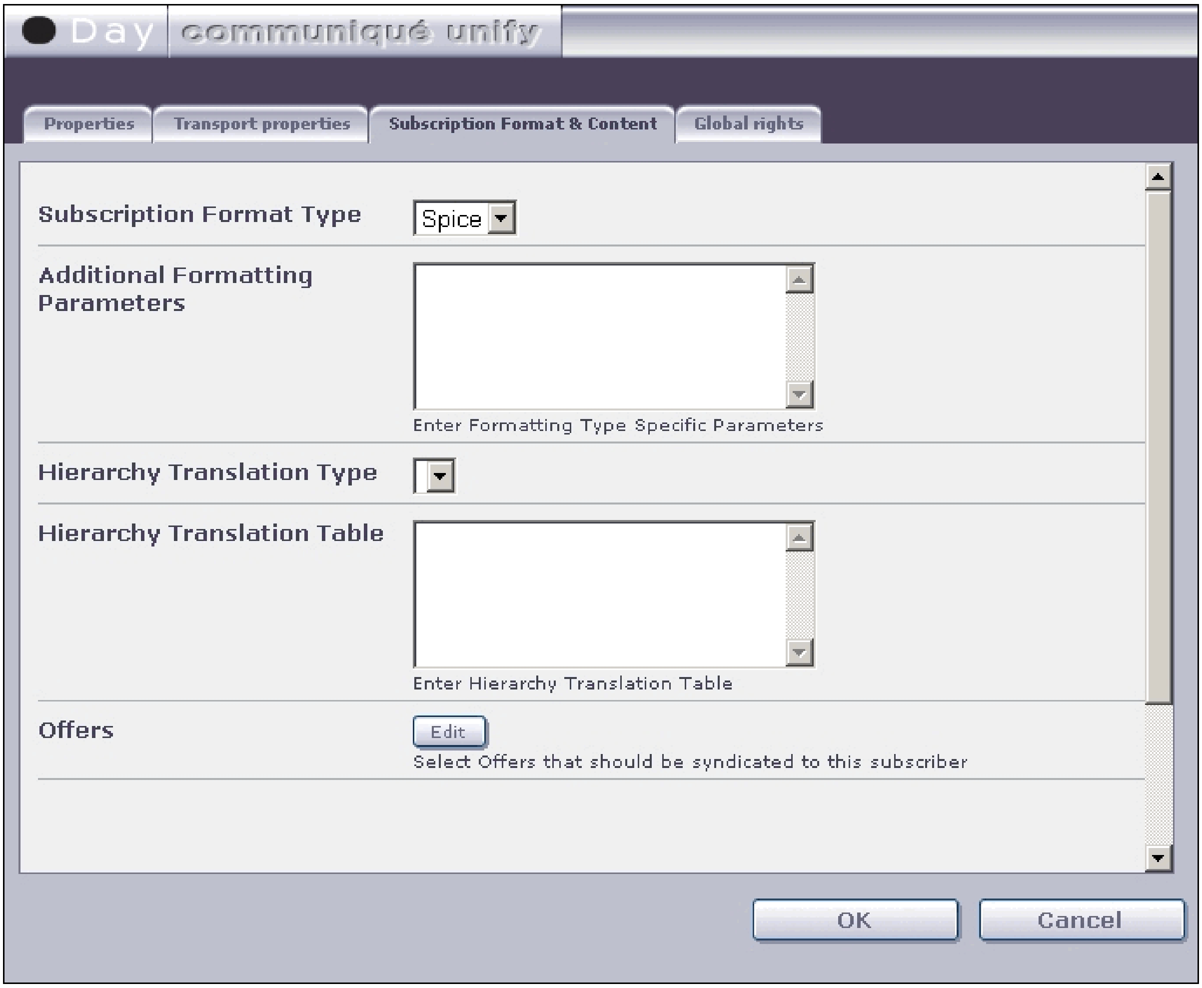
	executed together once a week.

If the subscriber is a Communiqué 3 Instance a receiver agent account would usually be the recipient.

To create such a receiver agent on the subscriber you simply create it in the CMS and then replicate it to the subscriber using the superuser account of the subscriber Instance. This account always exists.

After that you switch the transport user/password to the receiver agent account and all future replication will use this new account.

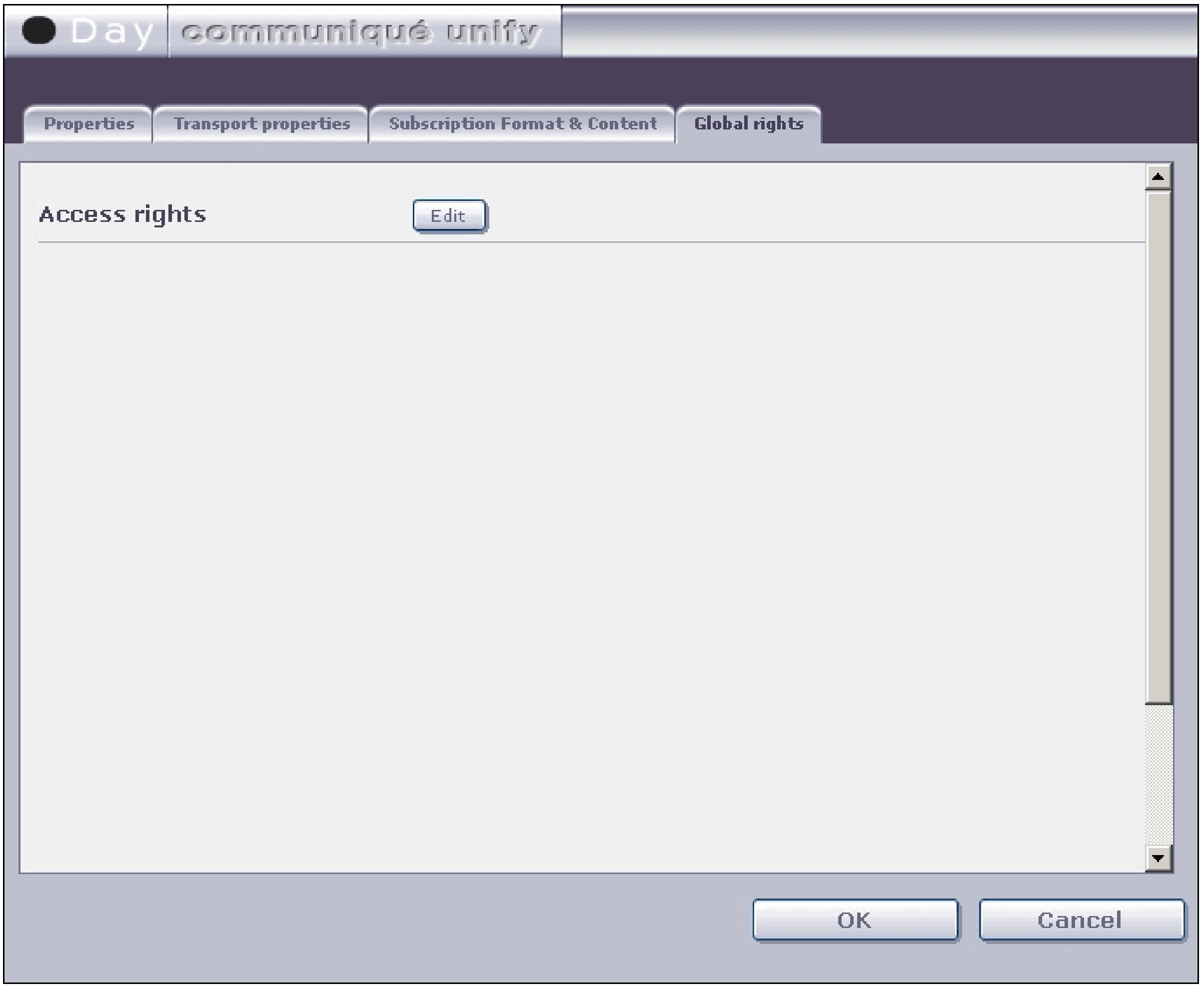
Subscription Format & Content



GUI Element	Description
Subscription Format	Defines how to content should be packed. Currently only one type exists,

Type	`SPICE`, the Communiqué standard format.
Additional Formatting Parameters	Future or project specific format types may use this field to get additional information about how to pack the content.
Hierarchy Translation Type	Future or project specific format types may use this drop down list to select from a list of available Hierarchy translations, e.g. hierarchy to flat etc.
Hierarchy Translation Table	Additional Information that may be needed by the hierarchy translation Algorithm may be defined in this field.
Offers	Offers that should be syndicated to this subscriber.

Global Rights

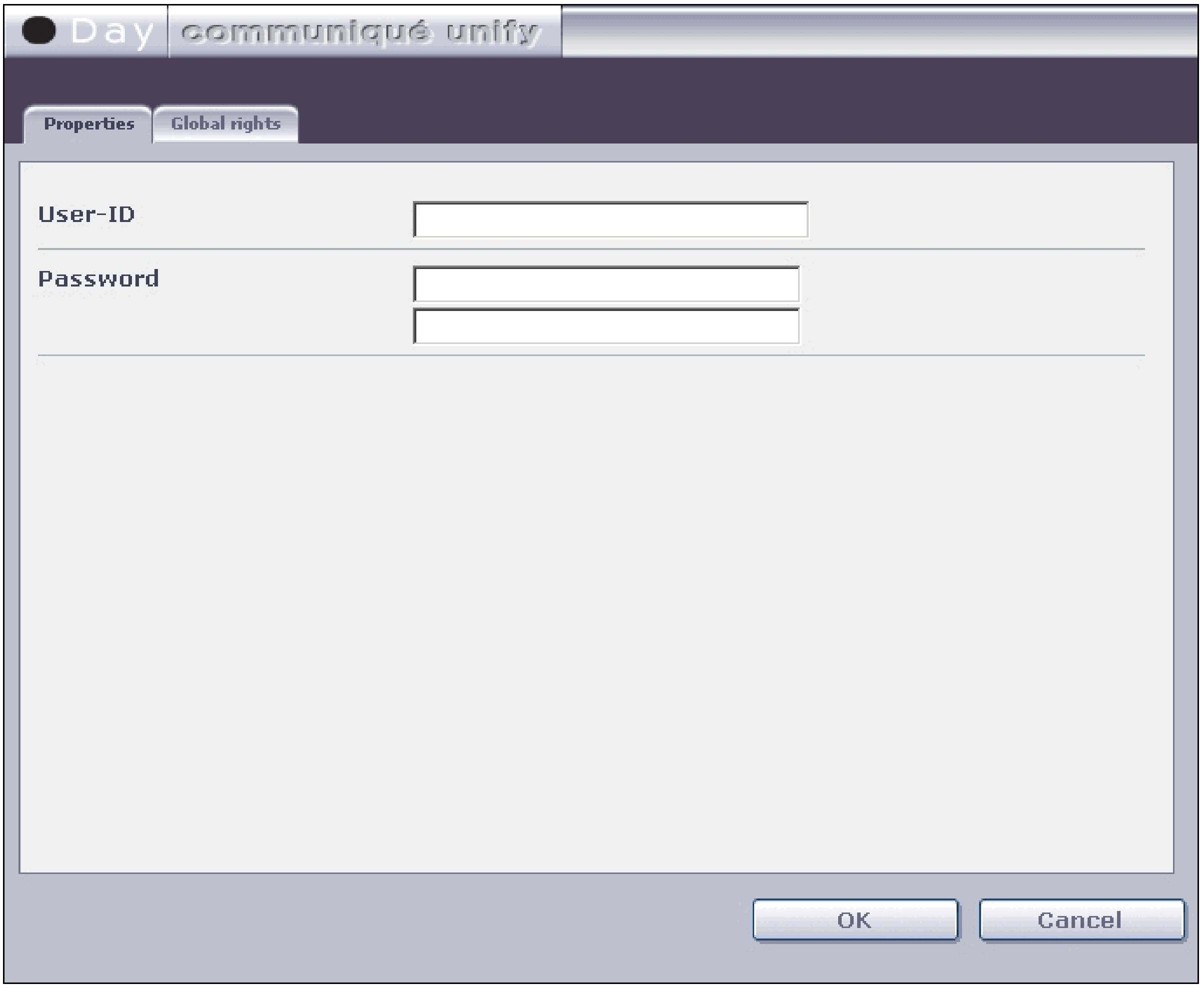


GUI Element	Description
Access Rights	Click on the **`Edit`** button to define the content access rights.

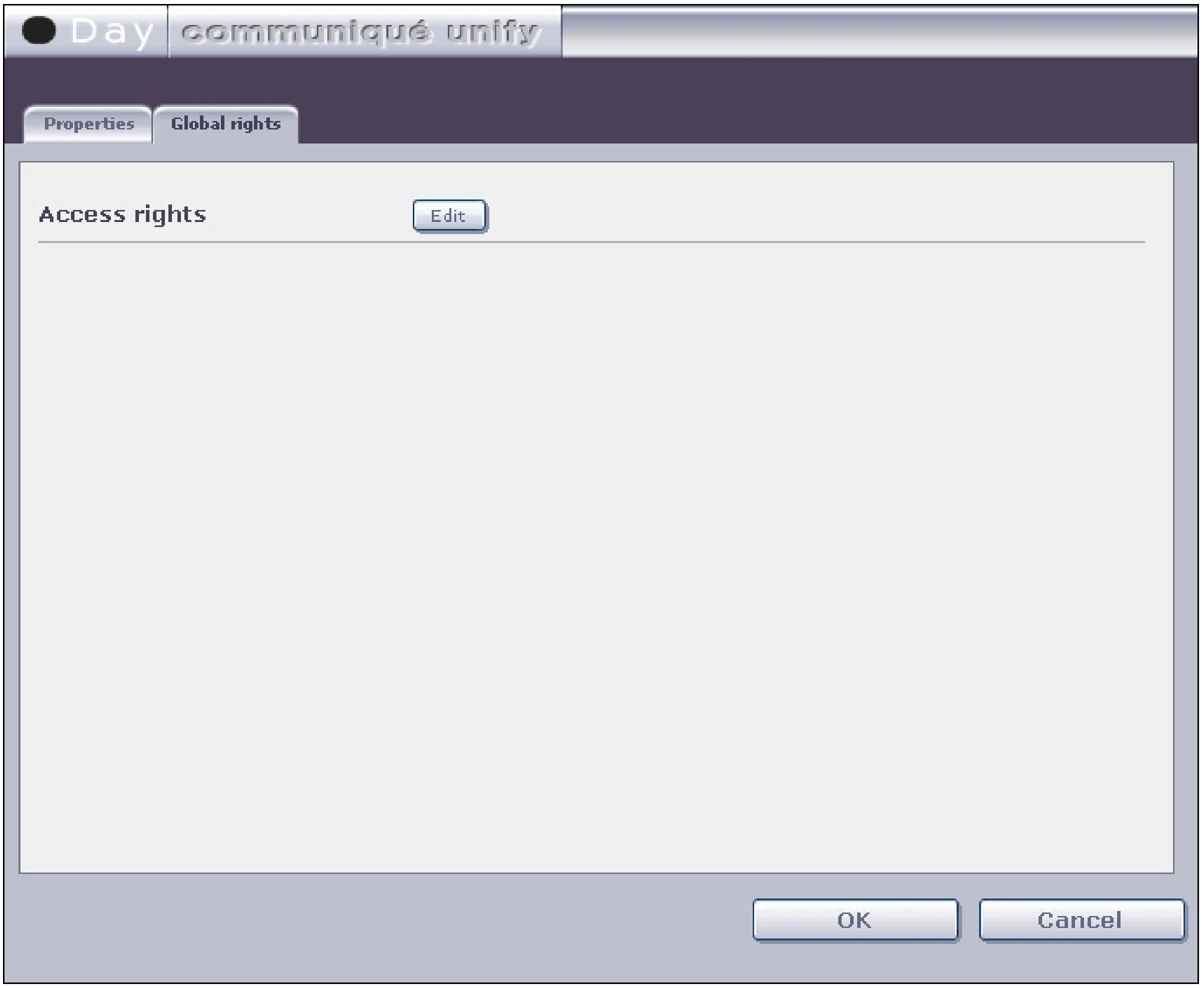
1.5.2.2.4. Replication Receiver Agent Properties

The replication receiver agent properties dialog has two tabs:

Properties



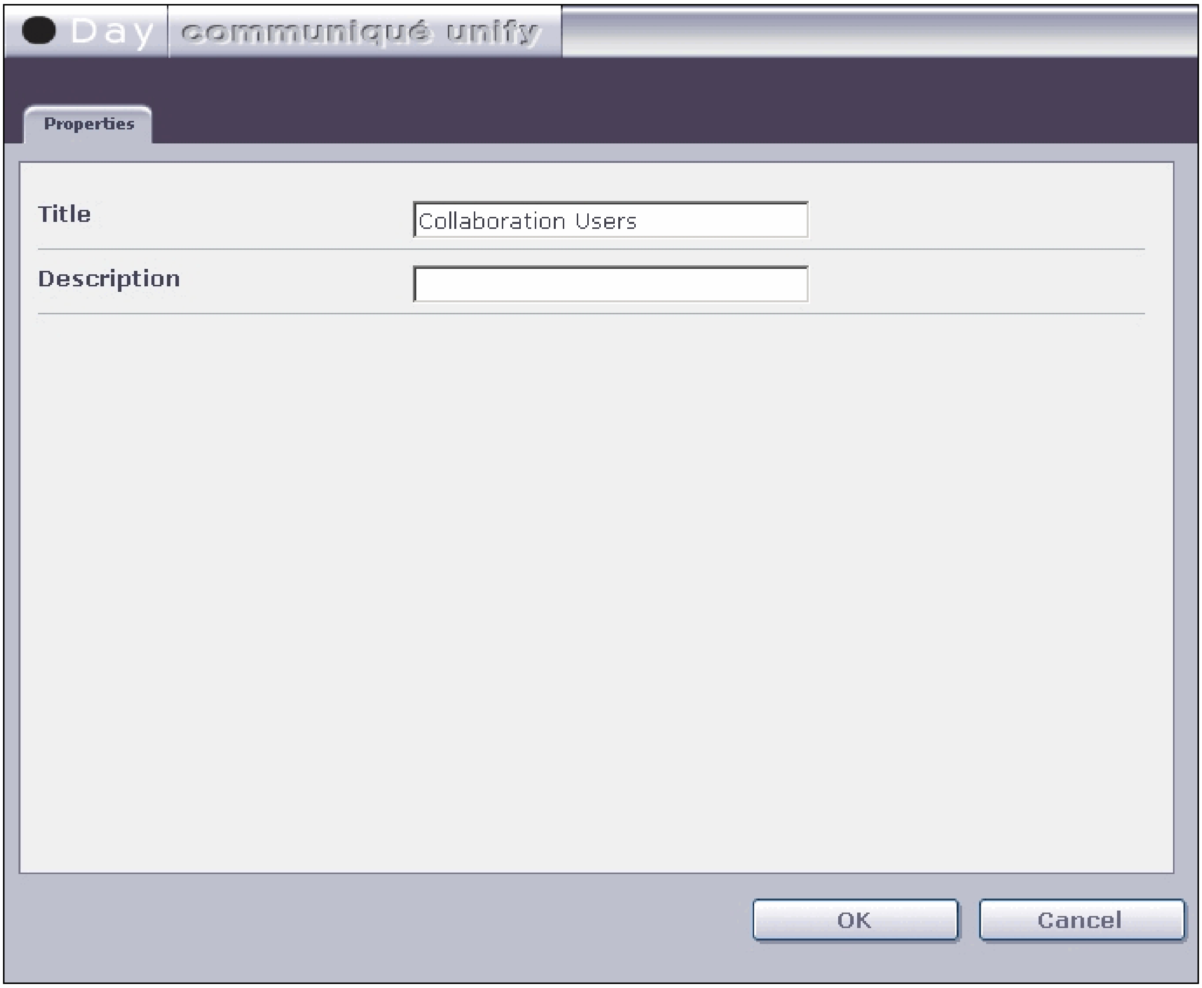
GUI Element	Description
User-ID	The agent name.
Password	Enter a password for the new agent. Note that the password is displayed as a series of asterisks for security. The password must be entered twice in order to verify that it is correct.



GUI Element	Description
Access Rights	Click on the **Edit** button to edit the access control list.

1.5.2.2.5. User Folder Properties

The user folder properties dialog has one tab:

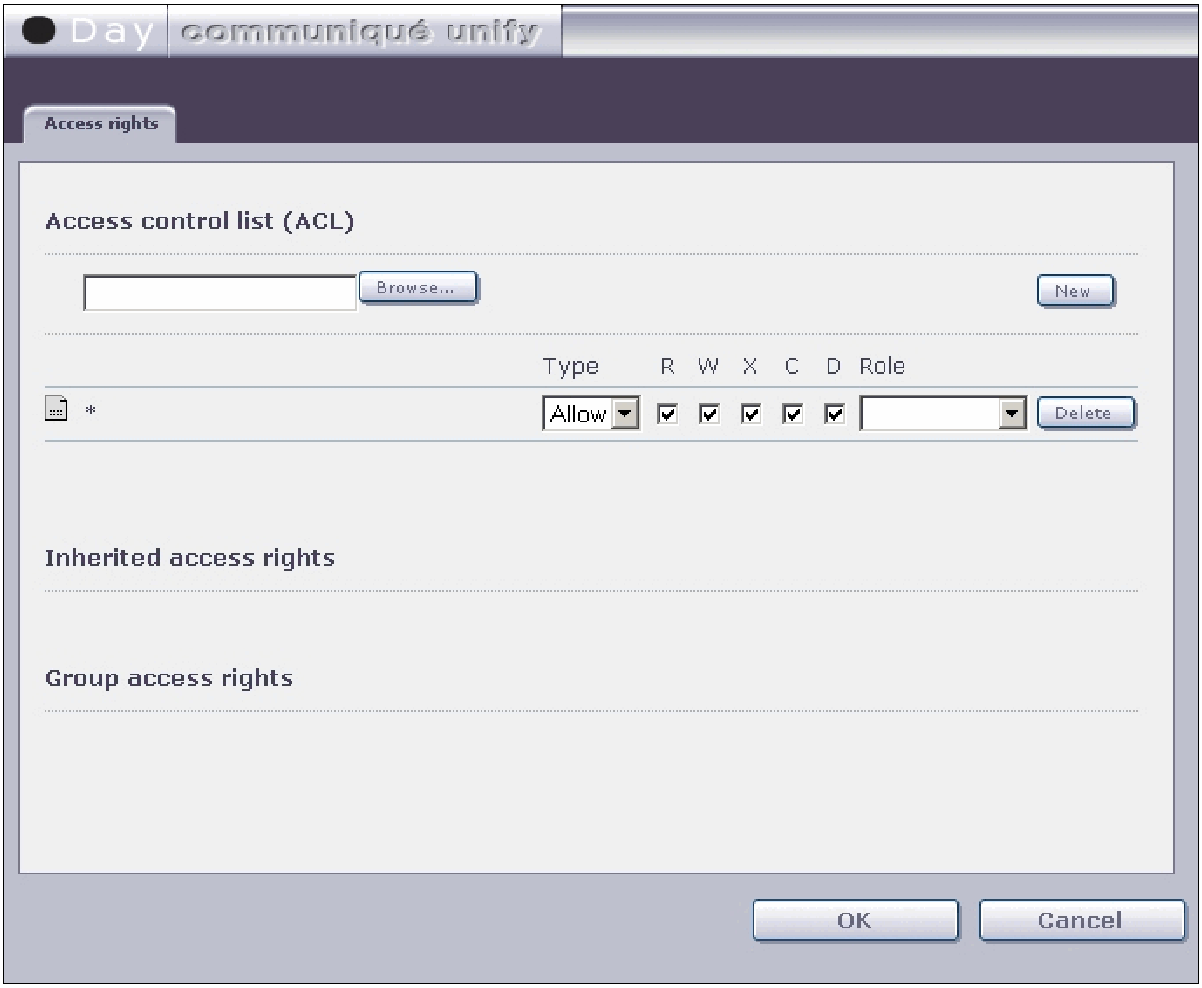


GUI Element	Description
Title	The Name of the folder shown in the user tree and listing.
Description	Description of the folder shown in the user listing.

1.5.2.2.6. Editing Page Access Rights

All user types and user groups get page access rights assigned in their user property dialogs by clicking on the **`Edit`** button in the **`Access Rights`** or **`Global Rights`** tab.

The same dialog opens for all user types and user groups:



GUI Element	Description
Access Control List	An ACL defines a number of **allow** and **deny** entries that are **compared against the page handle** being accessed by the user. The wildcard symbol * can be used to match multiple handles. To add an ACL entry, enter the root node handle of the content tree branch for the page to be allowed or denied. Alternatively, click on the **`Browse#`** button to select the handle from the

	site tree. Once the handle has been entered click on the **`New`** button to add the details for the given handle. The **`Type`** field defines if this entry is to either **`deny`** or **`allow`** the rights checked. The following rights can be set by clicking in the corresponding checkbox: **`R`**: View the pages in selected tree. **`W`**: Edit content in selected tree. **`X`**: Replication (activating/deactivating) of pages in selected tree. **`C`**: Create new sub pages in selected tree. **`D`**: Delete sub pages in selected tree. Each `allow` entry added to the ACL can also be assigned a role. The role works as a refinement on the read/write rights given to the user. The ACL is used to for general rights to a page and the role is used for rights down to the content element level. If no role is assigned the user can edit all elements on the page. Note that the order of the list entries is used when determining access rights. To order ACL entries, click the drag the file icon at the left of the ACL entry to the desired location.
Inherited Access Rights	This section lists the **access deny rights** that the user has **inherited** from the parent user.
Group Access Rights	This section lists the **access rights** that the user has **inherited** from its group. Please note that the ACL user does not inherit rights from groups since it can be assigned to one.

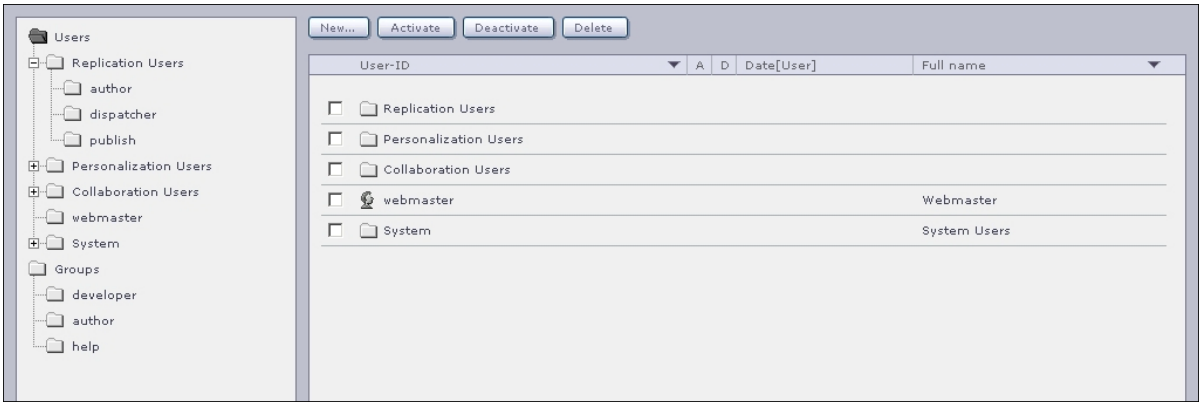
The order in which the access rights get evaluated is configurable. The default order is:

- The **pre rights** given by the ACL user located at **`/system/pre`** in the user tree are applied.
- Then the access rights of the **groups** the user belong to.
- The **user rights** defined in the above dialog gets applied next.
- The **inherited user rights** get applied.
- Finally the **post rights** defined by the ACL user located at **`/system/post`** in the user tree gets applied.

Check your project's user manual for any changes that may have been made to this configuration.

If you are editing the page access rights of an **receiver agent** you must make sure you give him **read, write, copy and delete rights** for his sections since he needs to read existing pages, update page, createn noew ones or delete them.

1.5.2.3. Activation / Replication of Users



The **activate** action allows you to replicate users to other Communiqué instances or other applications that are added as subscribers.

This is most often used if you have an authoring and publish instance, where the publish instance has parts that need authentication. The users for the publish site are managed on the authoring instance using the CMS and then replicated/activated to the publish instance.

To activate a user, first select that users(s) in the user listing by clicking on the checkbox to the left of the user entry, and then click the **`Activate`** button.

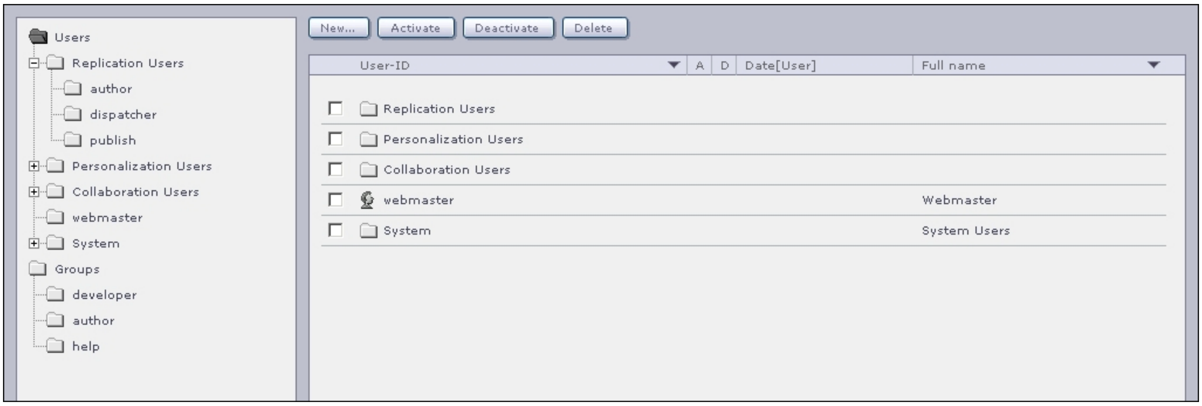
A message box will be displayed to confirm the choice. Clicking **`OK`** replicates the user to the defined subscribers; clicking **`Cancel`** will abort the operation.

Once the user is activated, the **`activated/deactivated`** indicator in the user listing pane changes to a **green square**.

The activating user can only activate its own account and all its subusers!

The default installation enforces by definition in the post ACL , that a user can only activate its own account and all its sub users. This is a security feature and should only be changed if you are absolutely sure what you do.

1.5.2.4. Deactivating Users

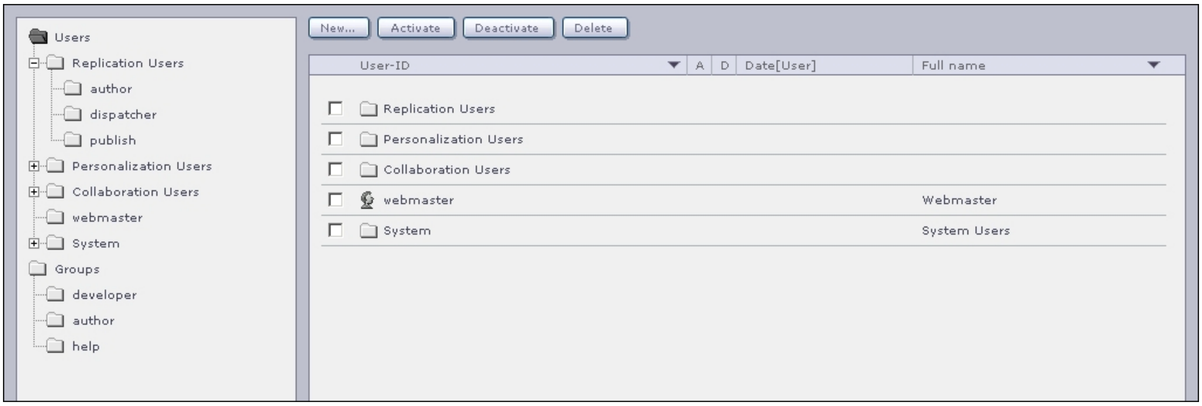


The **Deactivate** action allows you to delete users to other Communiqué instances or other applications that are added as subscribers.

This is most often used if you have an authoring and publish instance, where the publish instance has parts that need authentication. The users for the publish site are managed on the authoring instance using the CMS and then replicated/activated to the publish instance. If the user account expires or needs to be removed you use the **`Deactivate`** action.

To deactivate a user, first select the users(s) in the user listing by clicking on the checkbox to the left of the user entry, and then click the **`Deactivate`** button.

1.5.2.5. Deleting Users



The **Delete** action deletes the user on the local instance and on all active subscribers.

To delete a user, first select the users(s) in the user listing by clicking on the checkbox to the left of the user entry, and then click the **`Delete`** button.

A message box will be displayed to confirm the choice. Clicking **`OK`** deletes the user(s); clicking **`Cancel`** will abort the operation.

1.5.3. User Group Management Functions

The user group management functions are located in the user view above the listing pane:

What actions are available to the currently logged in author depends on the rights given to him.

All actions are performed on the user groups in the listing that have their checkboxes selected:

Adds a new user group to the user group listing.

Replicates the selected user group(s) to the defined subscribers.

Deletes the selected user group(s) on the defined subscribers.

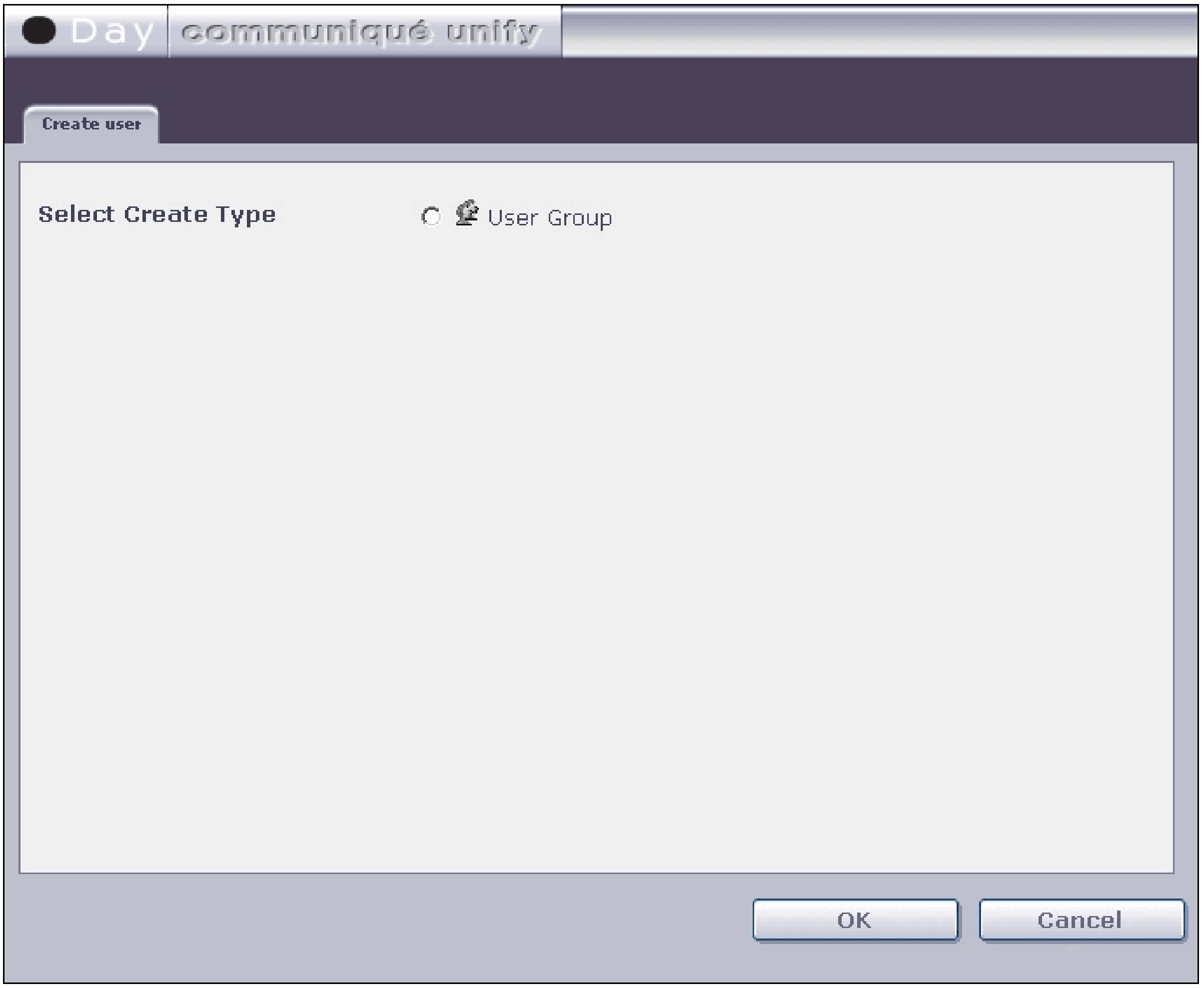
Deletes the selected user group(s) from the content repository.

1.5.3.1. Creating new User Groups

.

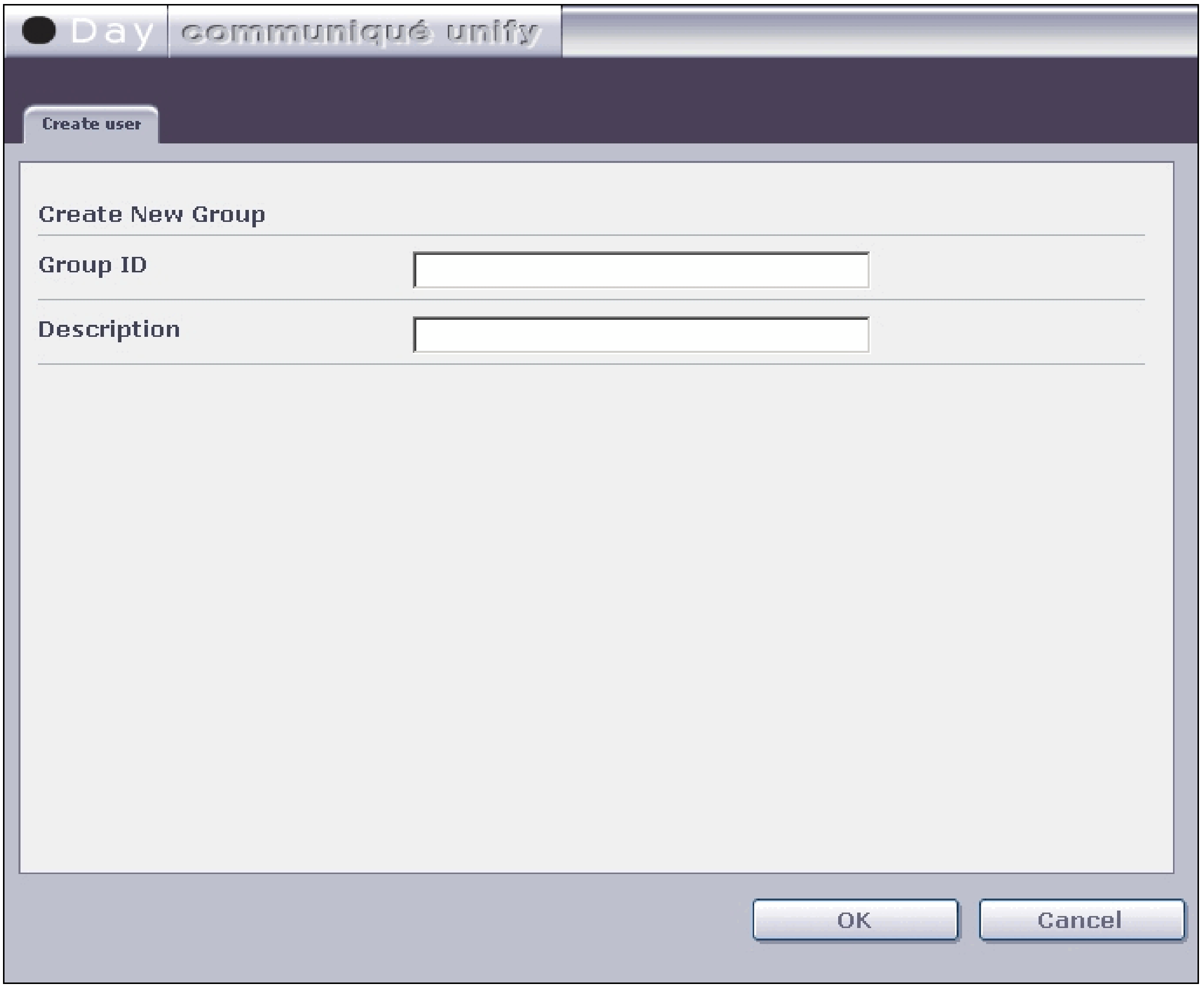
To create a user group, first select the branch where the new group should be inserted. This is done by selecting the new groups **parent** in the **group tree**, so that the new groups **siblings** are shown in the listing.

Then click the **`New#`** button. CMS displays the **`Create User`** dialog:



This is the same dialog as when creating an new user but the only valid selection is **user group**.

After selecting **User Group**, you will get the following dialog:

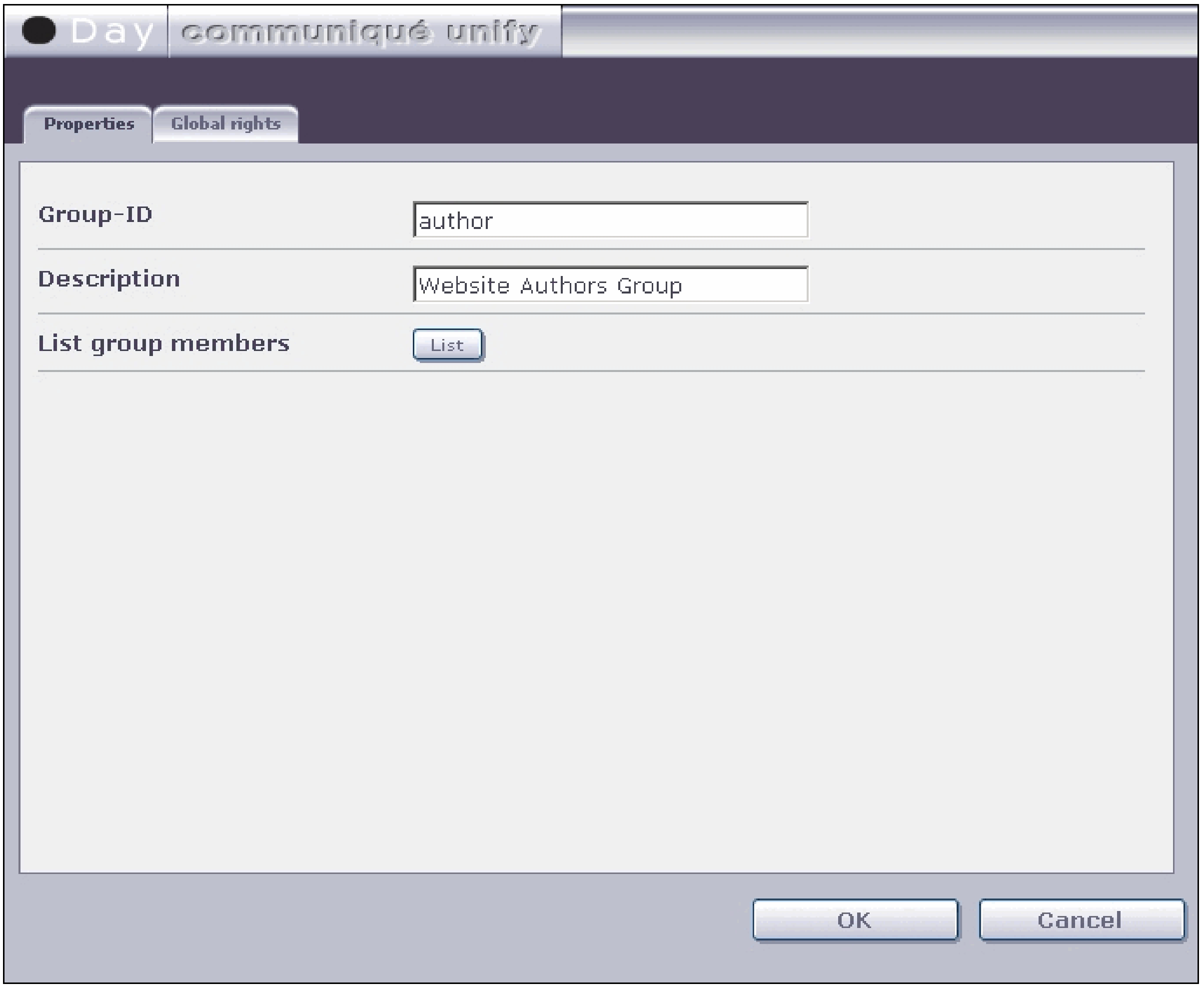


GUI Element	Description
Group ID	Name of the new user group. The group ID may not contain blanks or special characters.
Description	Short description of the new user group. Shown in the user group listing.
OK	Clicking on OK will create the new user group and close the dialog.
Cancel	Will abort the creation process and close the dialog.

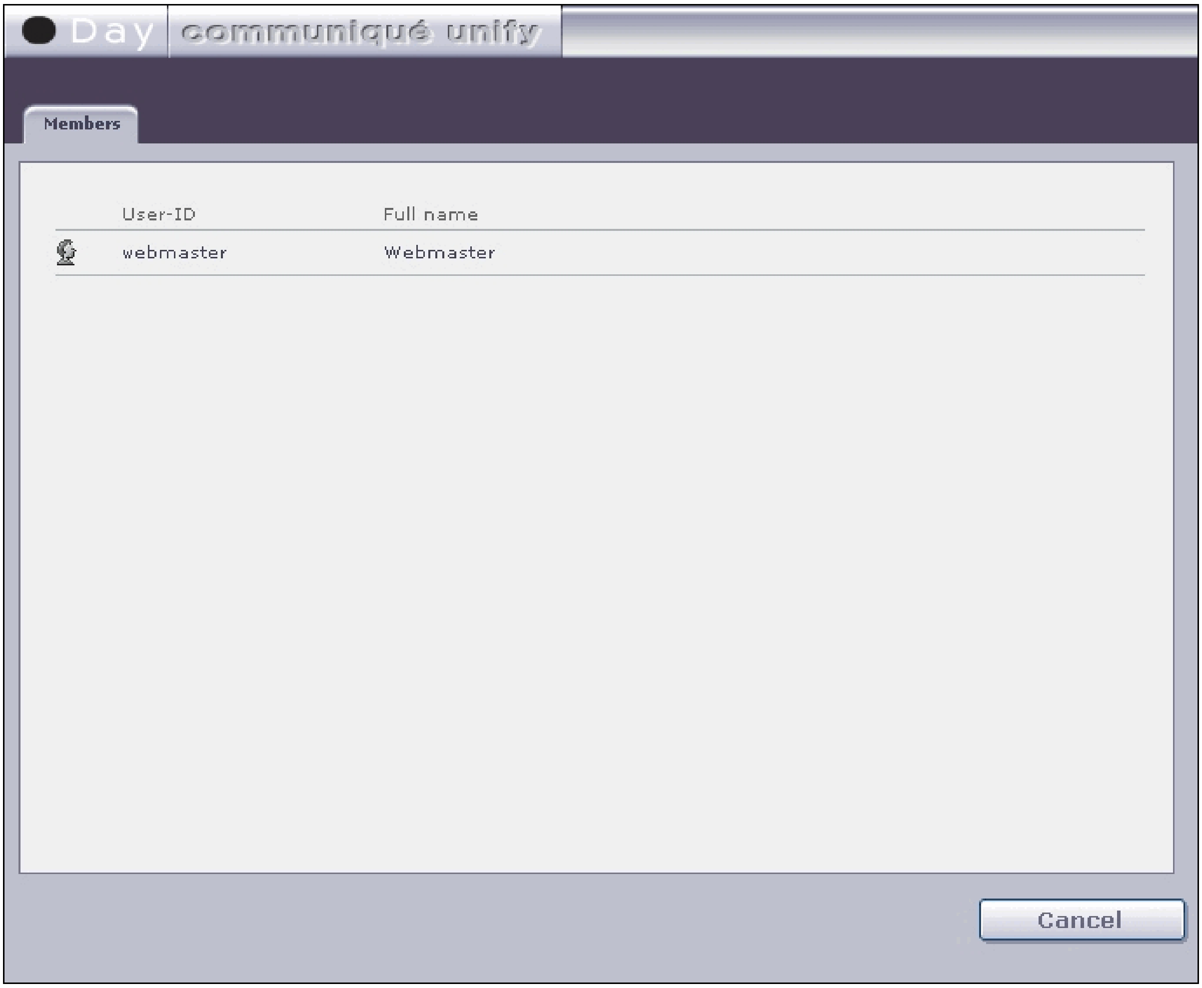
1.5.3.2. Editing User Group Properties

To edit the properties of a user group you must click on its icon in the user group listing to open the user properties dialog.

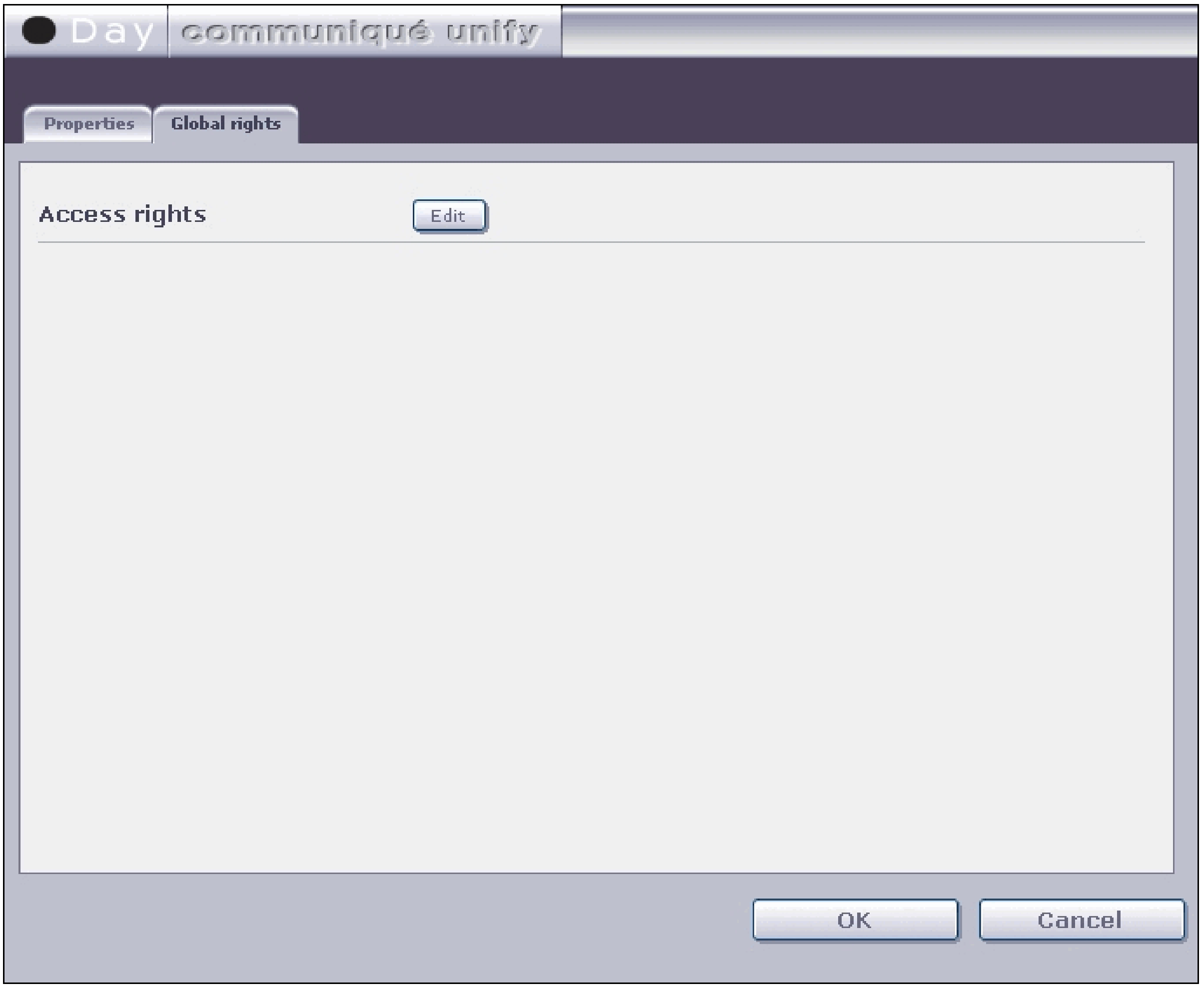
Properties



GUI Element	Description
Group-ID	You can edit the name of the group here.
Description	Description of the group.
List group members	By clicking on `List` all members of the group will be listed in separate dialog. See screenshot below.

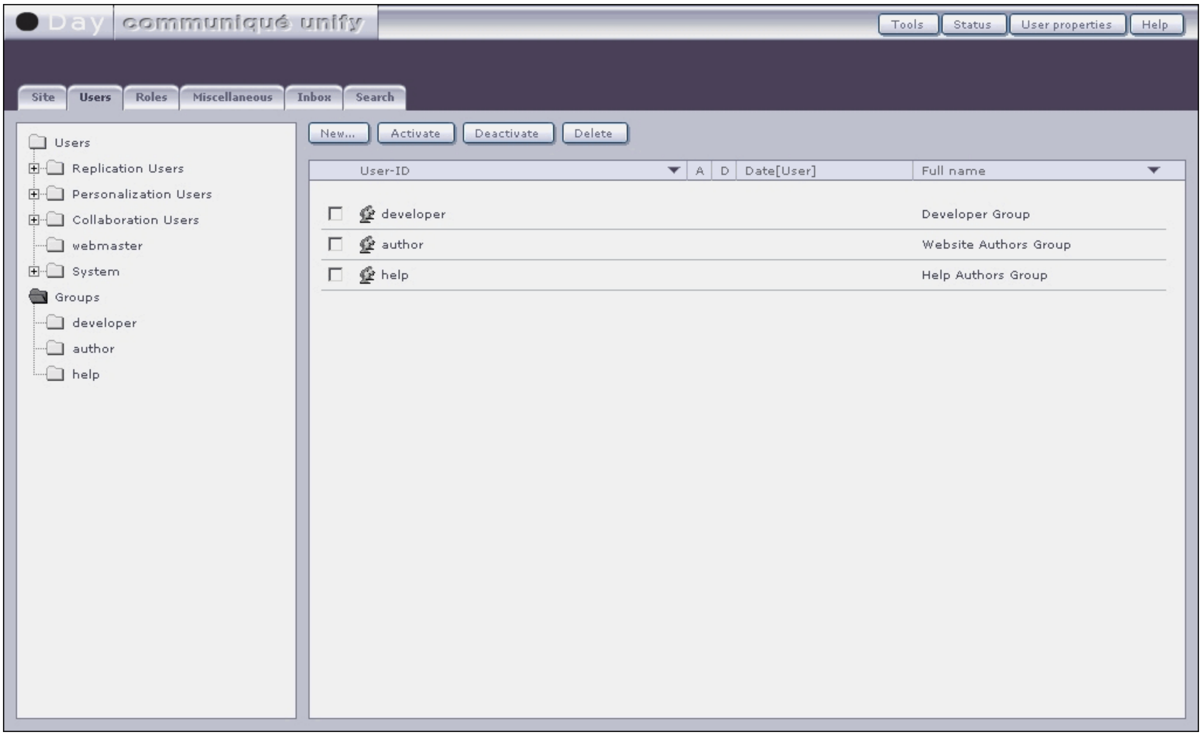


Global Rights



GUI Element	Description
Access Rights	Click on the **`Edit`** button to edit the access control list for the group.

1.5.3.3. Activation/Replication of User Groups



The **Activate** action allows you to replicate user groups to other Communiqué instances or applications that have been added as subscribers.

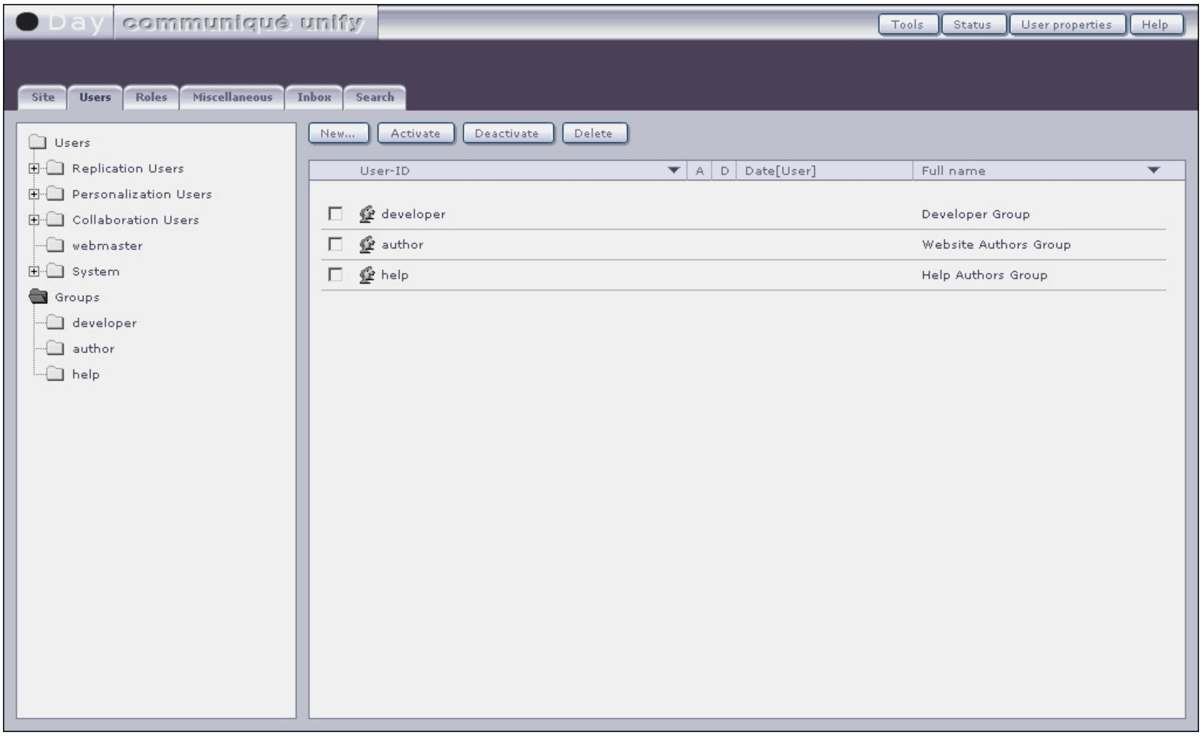
This is most often used if you have an authoring and publish instance, where the publish instance has parts that need authentication. The user and user groups for the publish site are managed on the authoring instance using the CMS and then replicated/activated to the publish instance.

To activate a user group, first select it in the user group listing by clicking on the checkbox to the left of the user group entry, and then click the **`Activate`** button.

A message box will be displayed to confirm the action. Clicking **`OK`** replicates the user group to the defined subscribers; clicking **`Cancel`** will abort the operation.

Once the user group is activated, the **`activated/deactivated`** indicator in the user group listing changes to a **green square**.

1.5.3.4. Deactivating User Groups

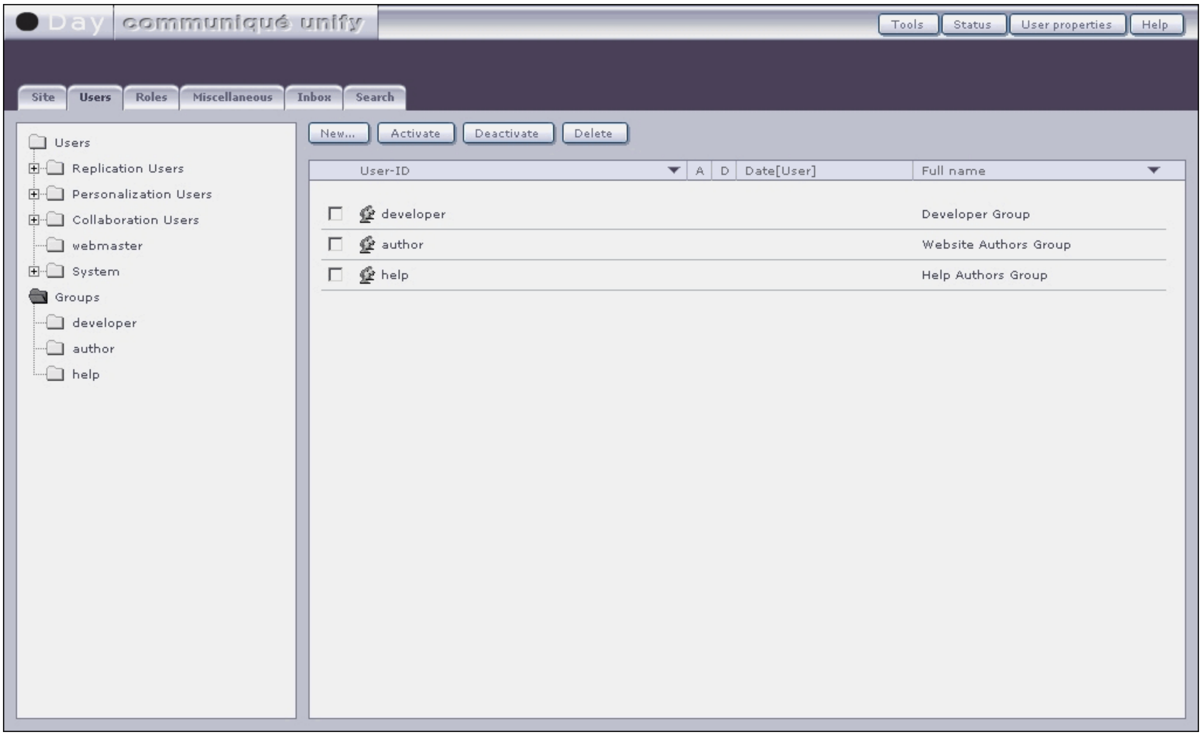


The **Deactivate** action allows you to delete user groups on other Communiqué instances or applications that have been added as subscribers.

This is most often used if you have an authoring and publish instance, where the publish instance has parts that need authentication. The users and user groups for the publish site are managed on the authoring instance using the CMS and then replicated/activated to the publish instance. If the user group rights expire or needs to be removed you use the **`Deactivate`** action.

To deactivate a user group, first select the user group(s) in the user group listing by clicking on the checkbox to the left of the user entry, and then click the **`Deactivate`** button.

1.5.3.5. Delete User Groups



The **Delete** action deletes the user group on the **local Instance and on all subscribers**.

To delete a user group, first select it in the user group listing by clicking on the checkbox to the left of the user group entry, and then click the **`Delete`** button.

A message box will be displayed to confirm the choice. Clicking **`OK`** deletes the user group(s); clicking **`Cancel`** will abort the operation.

1.5.4. Impersonation

Communiqué 3.5.2 allows for the **impersonation** of one user by another. Impersonation allows one user to temporarily acquire the rights of an other user and to perform adminstrative and content management tasks under the new identiity. This capability can be useful in cases where, for example, one person must temporarily take on the authoring or administrative responsibilities of another.

Permission to impersonate a user must be granted by that user (or by the superuser) to the potential impersonators. The rules regarding impersonation privileges are:

- The superuser can impersonate any other user.
- The superuser can grant permission to impersonate any user to any other user.
- A normal user (i.e., a non-superuser) can grant permission to impersonatie himself or herself to any sub-user (i.e., any user lower in the user hierarchy).
- Impersonation permission can be withdrawn at any time by the granting user (or the superuser).

Impersonation

- Enabling Impersonation
- Granting Impersonation Permission
- Impersonating Another User

1.5.4.1. Enabling Impersonation

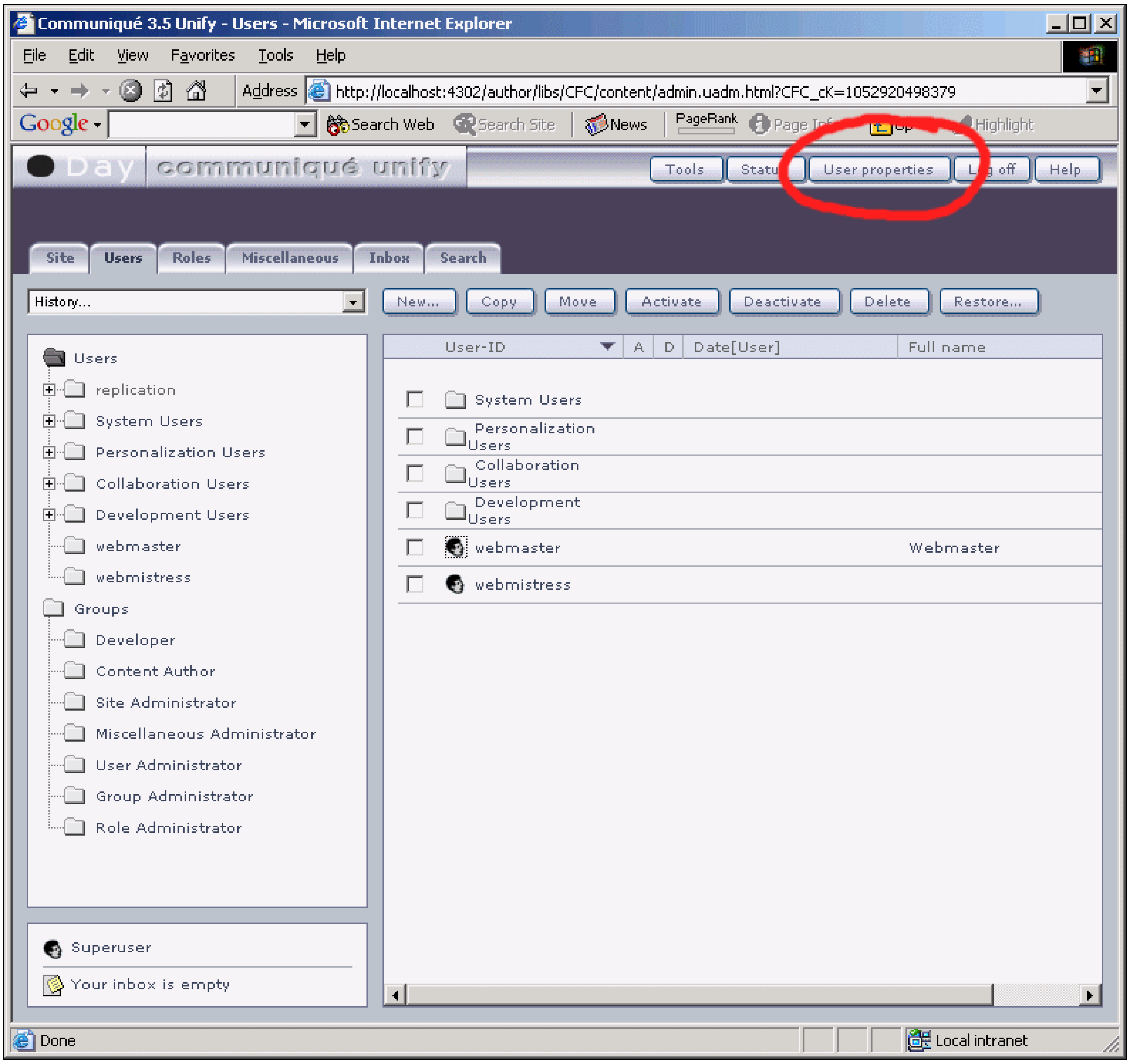
There are two aspects to the impersonation function:

- Granting permission to another user allowing them to impersonate you.
- Impersonating another user from among the list of users who have granted you permission to do so.

Depending on the capabilities and restrictions placed on you by the User Administrator, you may have either both of these capabilities or just the latter.

Enabling the Granting of Impersonation Permission

To grant another the right to impersonate you, you must have a **User Properties** button visible in the top-right of your administration interface:

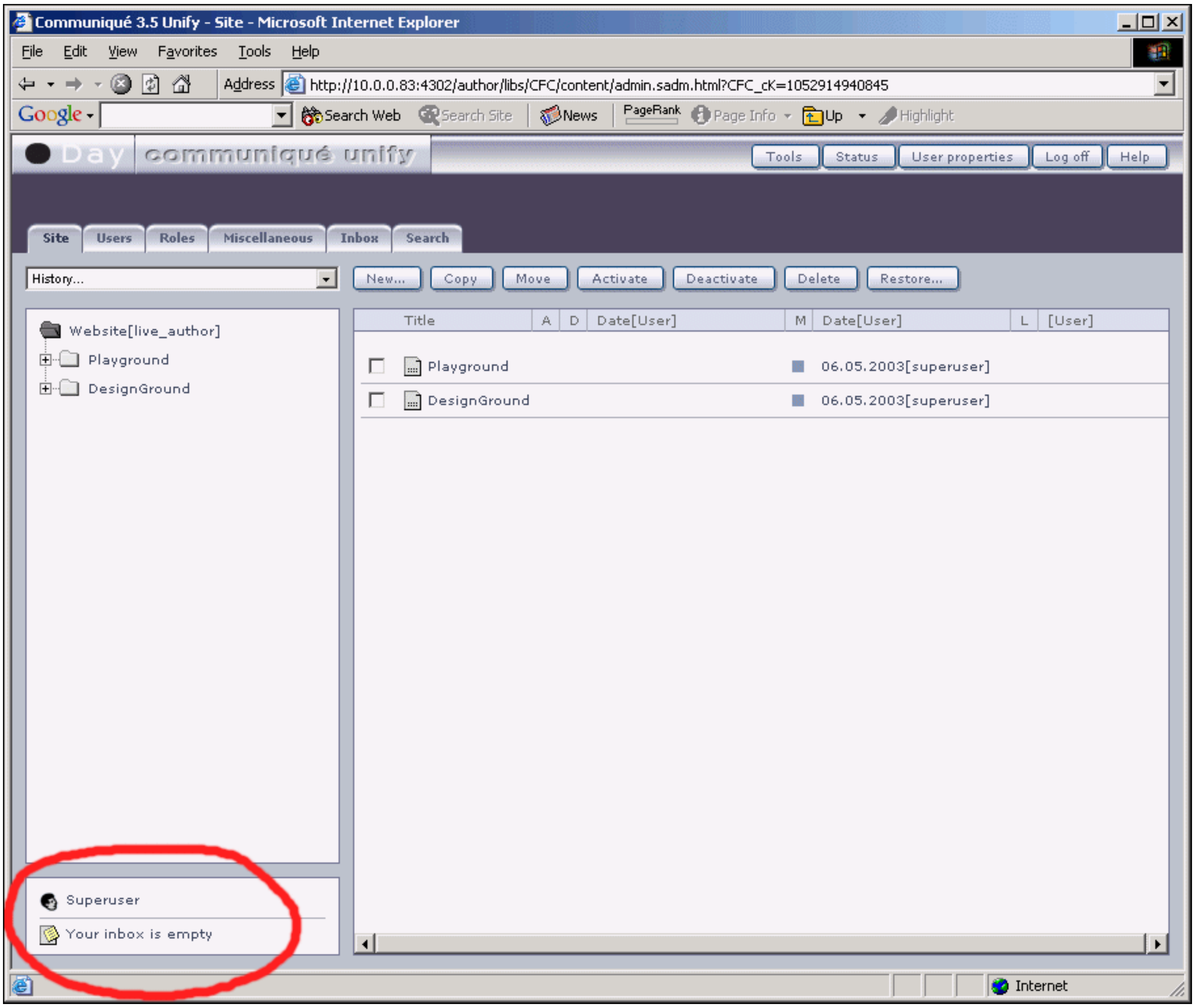


If you do not have such a button, this is an issue to take up with your User Adminstrator. For information on how your User Adminstrator can change this setting see User Properties, above (for reference, and assuming you have user administration privileges, the relevant setting is accessed by going to the **Users** tab in the main administration screen, clicking on the user in question, then, in the dialog that appears, going to the **Global rights** tab, and then, under **Allowed tools**, checkmarking **User properties**).

Assuming you have the **User properties** button available, the actual granting of impersonation permission is explained in section Granting Impersonation Permission, below.

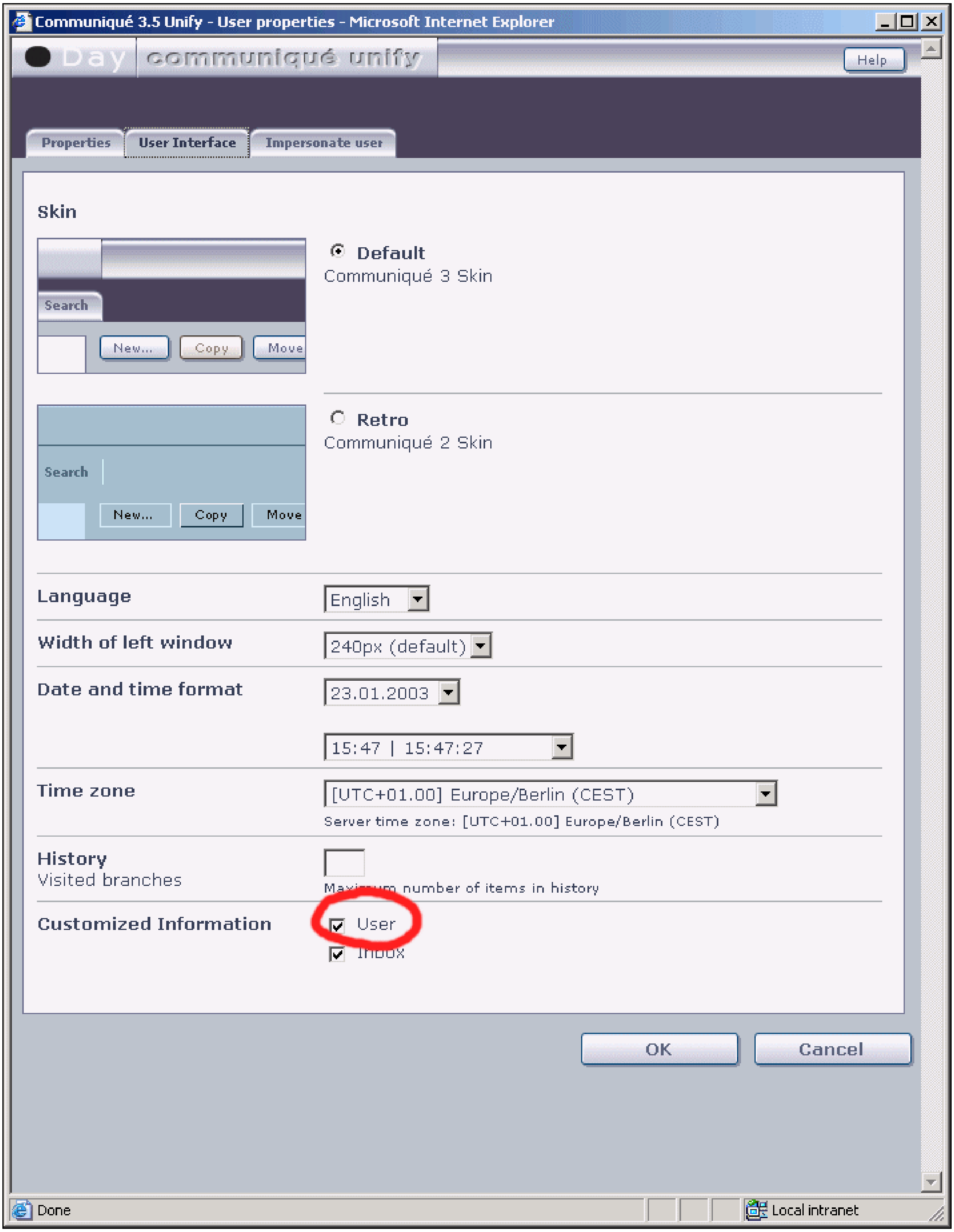
Enabling the Impersonation of Another User

To impersonate another user, the **Current User Indicator** must be present in the **Quick View Box** in the lower-left of your adminstration screen.



If the this indicator is missing from the **Quick View Box**, or the **Quick View Box** is missing altogether, this can be changed by adjusting either adjusting your own user properties settings or (if you do not have a **User Properties** button) getting your User Adminstrator to adjust your settings.

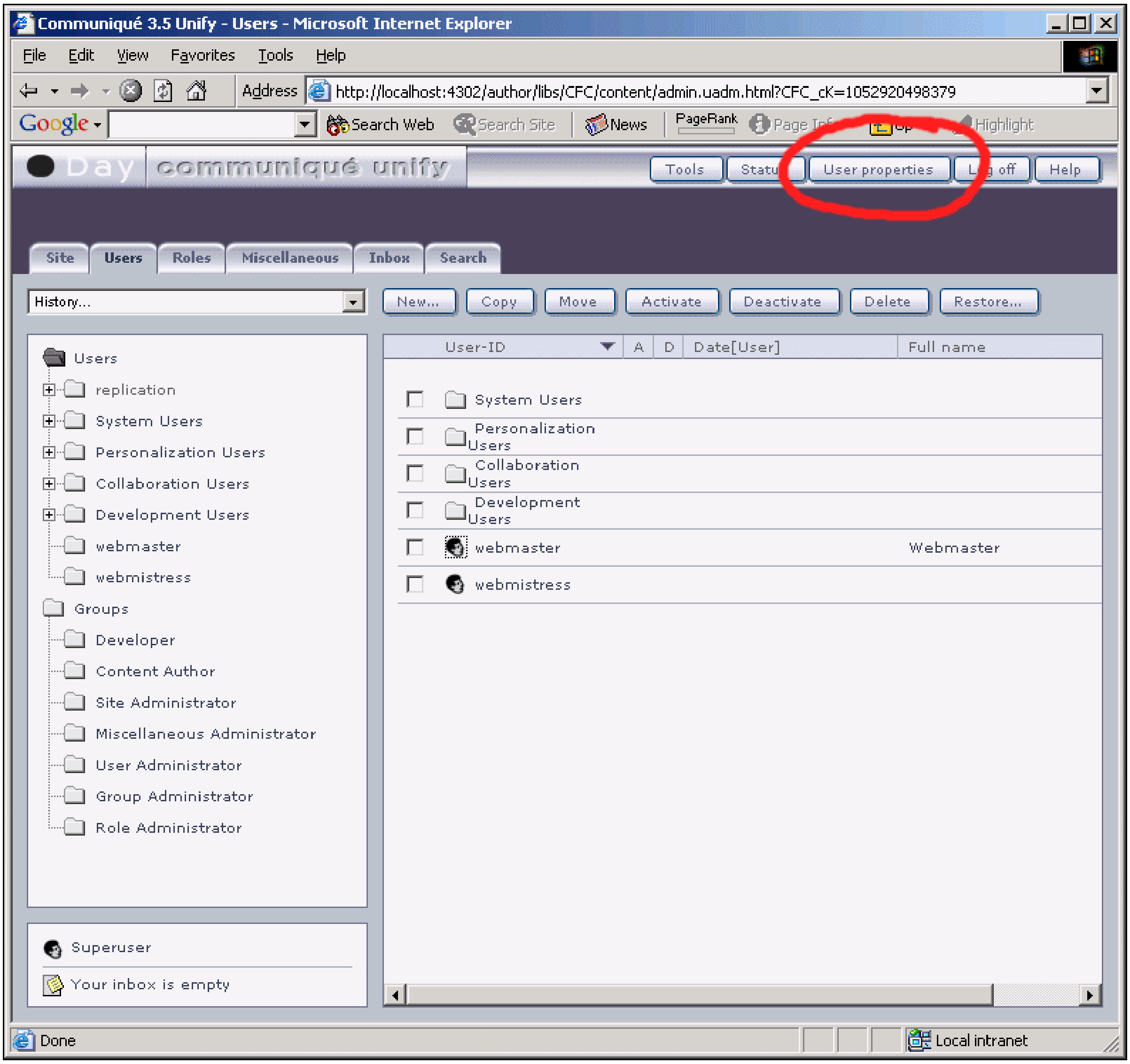
In either case the dialog that comes up is the same.Click the button and go to the **User Interface** tab in the dialog and make sure that under **Customized Information** the checkbox beside **User** is checked:



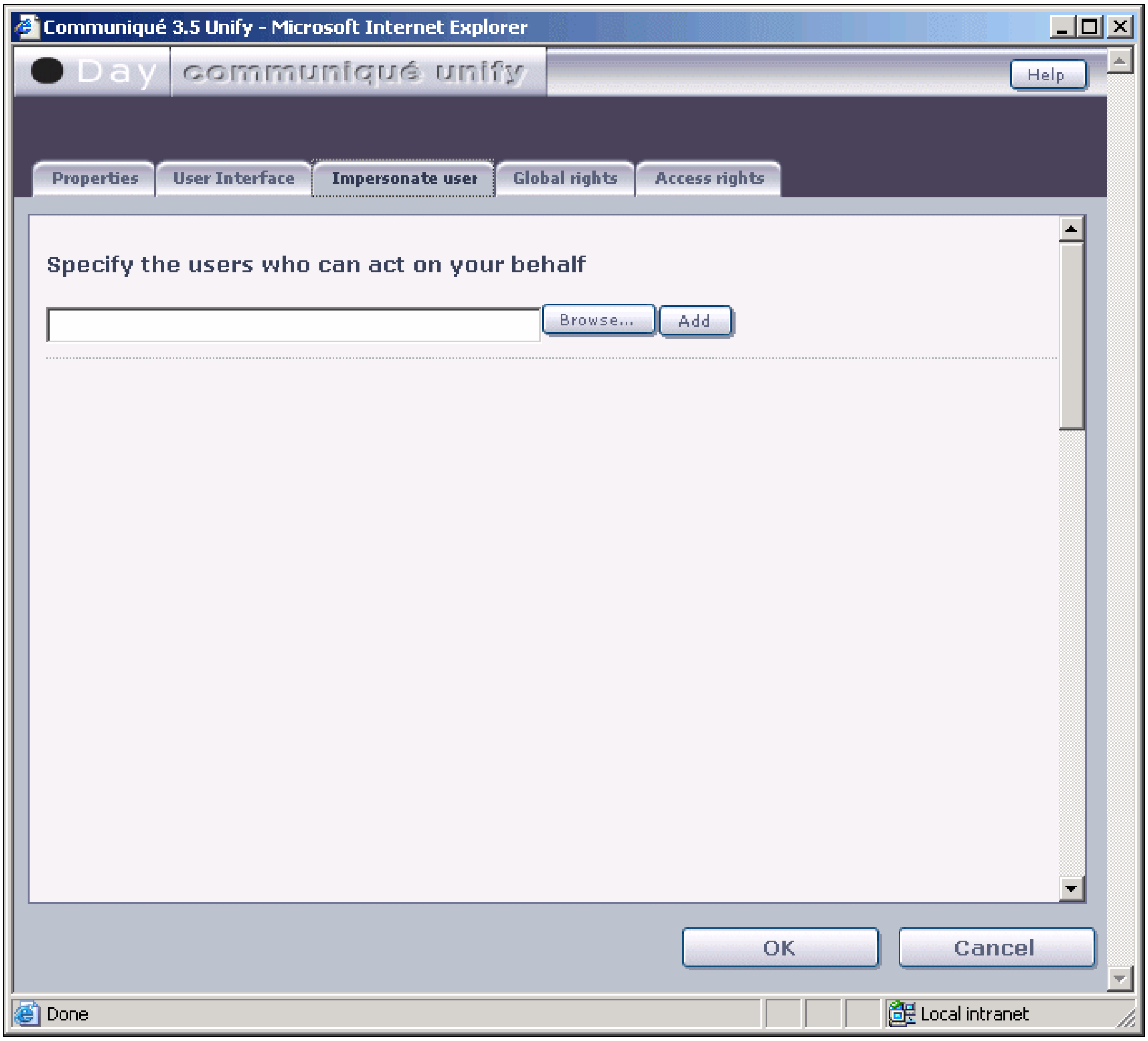
Assuming that you do have the **Current User Indicator** in the **Quick View Box**, the actual impersonation of another user is explained in the section Impersonating Another User, below.

1.5.4.2. Granting Impersonation Permission

To grant another user permission to impersonate you, click the **User properties** button in the top right of your administration screen:



In the dialog, go to the Impersonate user tab, click browse to select a user (or type the user path directly into the text field) who will be given the right to impersonate you. Then click **Add**. Repeat this process to add more users to the list:

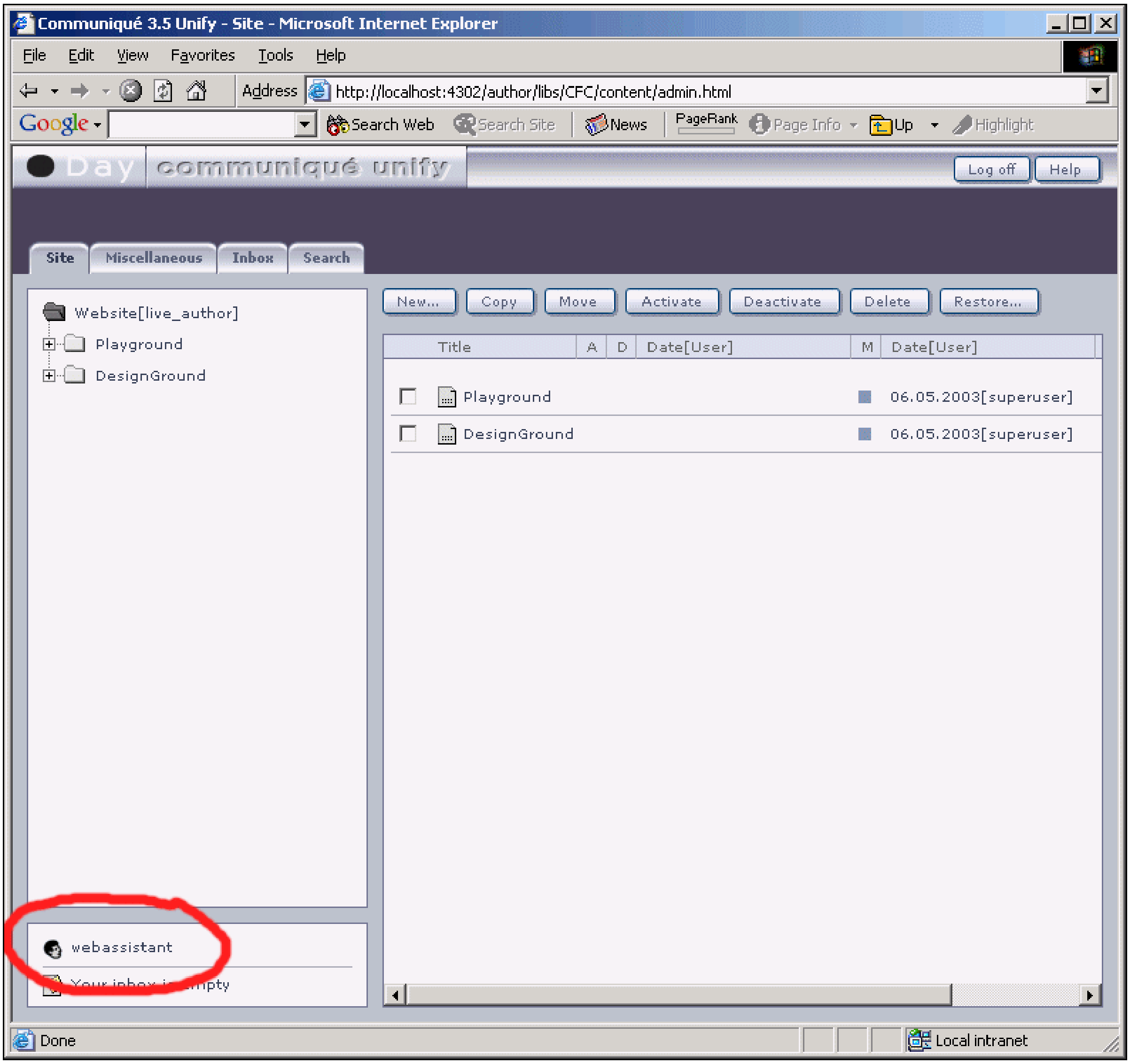


This procedure can be performed either by you as a normal user or by the **User Adminstrator**. If you are doing it as normal user, the range of possible user to whom you can grant impersonation privileges incudes only those users below you.

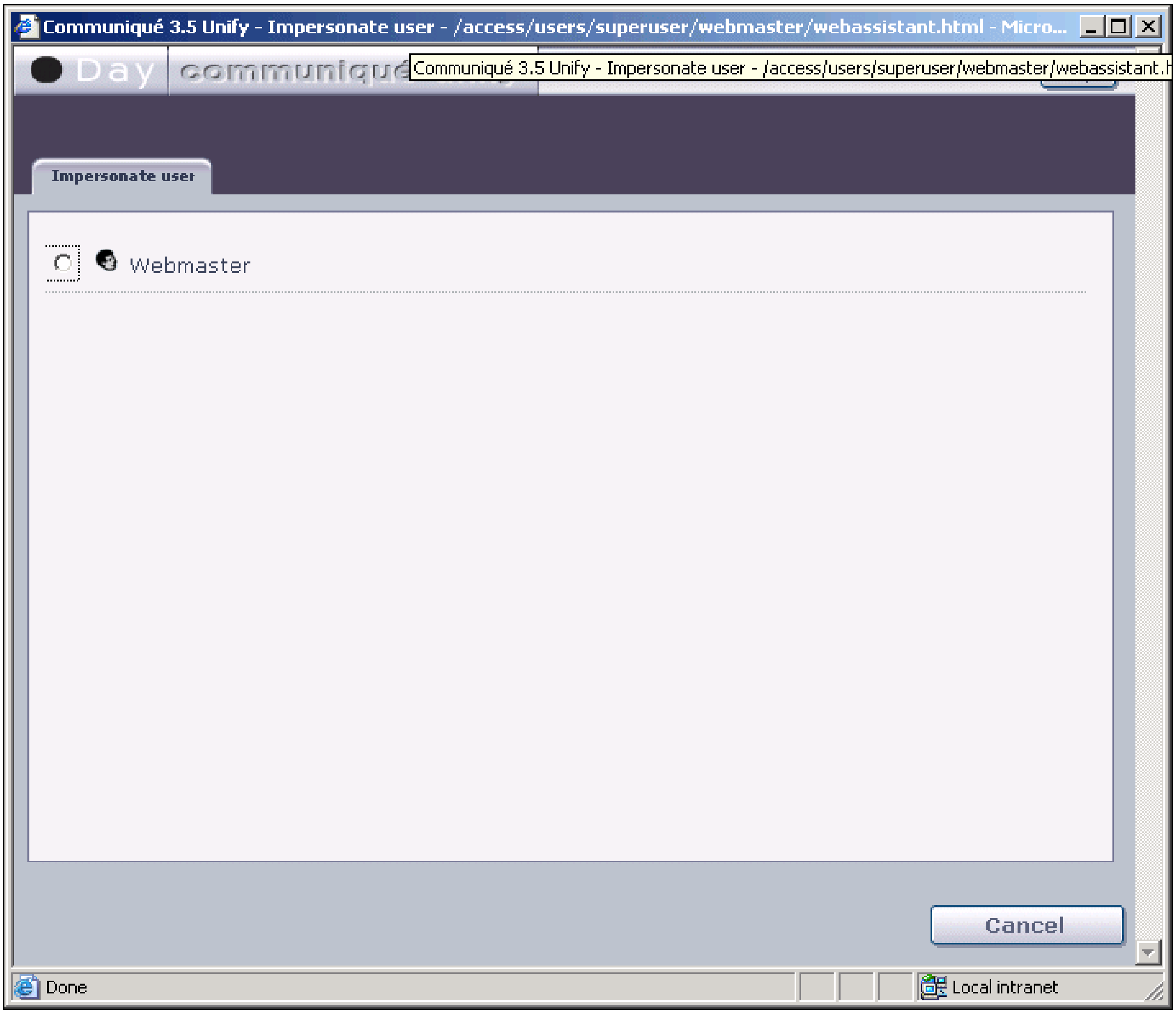
The **User Administrator**, on the other hand, not only has access to the user properties of every user on the system but also but can also grant impersonation privileges on behalf any user to any other user, regardless of their relative position in the user hierarchy.

1.5.4.3. Impersonating Another User

Once someone has granted you permission to impersonate them, you will be able to do so by clicking the **Current User Indicator** icon in the lower-left corner of your adminstration interface:

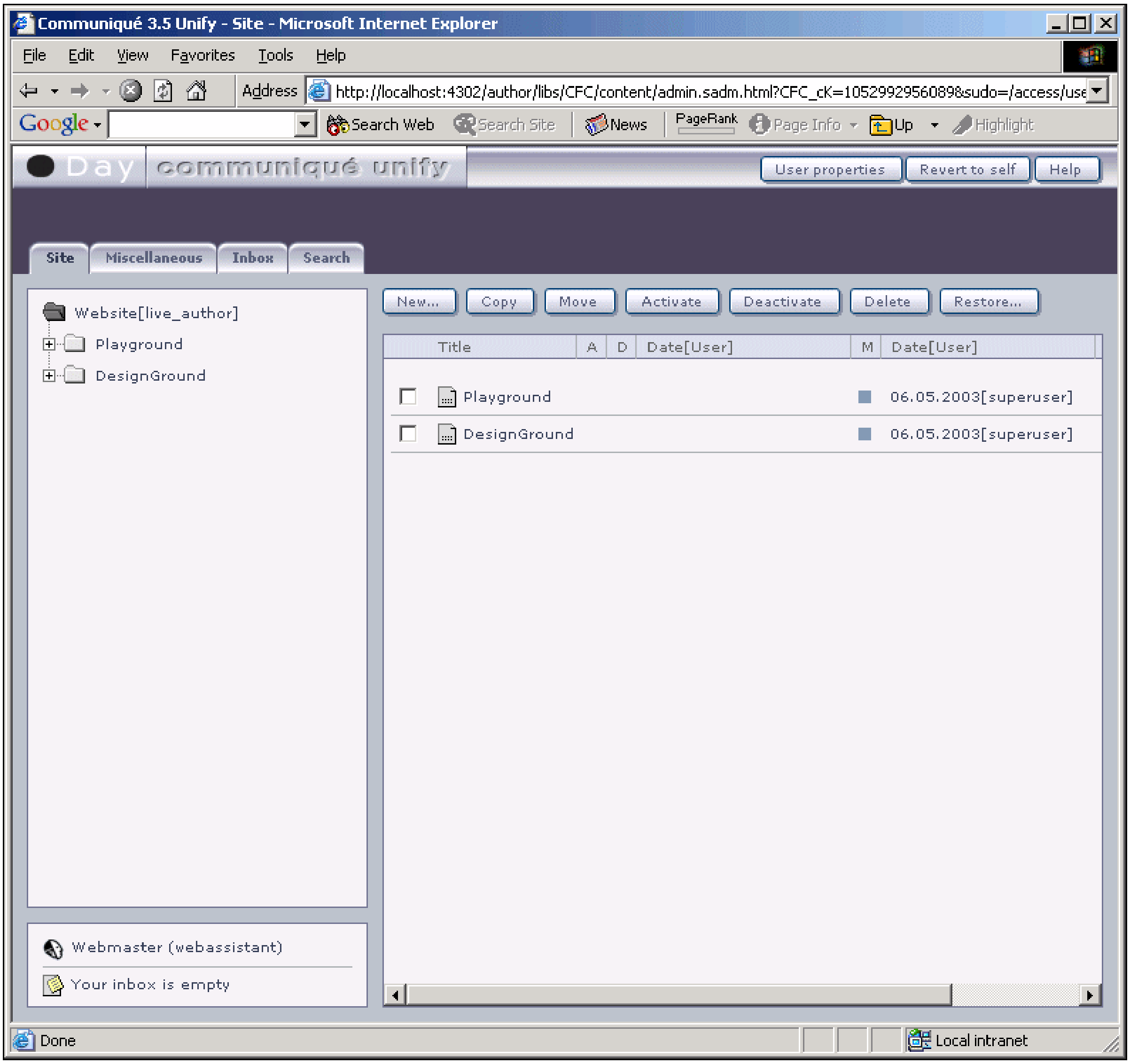


This will bring up a dialog listing all users who have given you permission to impersonate them. In this case the user **webassistant** has been granted permission to impersonate the user **webmaster**:



Clicking on the radio button will cause the administration interface to change to that of the impersonated user. The **Current User Indicator** in the lower-left will change to a *face wearing a mask* with the name of the impersonated user beside it and the name of the impersonating user in parantheses.

A new button will also appear in the upper-right area, called **Revert to self**. Clicking that button, or clicking the masked face icon, both cause the impersonation session to end and the interface to return to that of the original user.


Communiqué 3.5 Unify - Site - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://localhost:4302/author/libs/CFC/content/admin.sadm.html?CFC_cK=1052992956089&sudo=/access/use
Search Web Search Site News PageRank Page Info Up Highlight
Day communiqué unify
User properties Revert to self Help
Site Miscellaneous Inbox Search
Website[live_author]
Playground
DesignGround
New... Copy Move Activate Deactivate Delete Restore...
Title A D Date[User] M Date[User]
Playground 06.05.2003[superuser]
DesignGround 06.05.2003[superuser]
Webmaster (webassistant)
Your inbox is empty
Done
Local intranet

1.6. Roles Management

From a logical point of view a role identifies the job or task a user has on a specific web page and gives the user the necessary modification rights **on the page content** to perform his task.

For example, if the user is in the role of a designer he should be able to edit all images in the content page but not the text parts.

So, from a technical point of view a role defines the access rights on the content elements in a content page while the user access rights define the general access rights to the page as a whole.

Multiple users can belong to the same role and a single user can have different roles on different pages.

Roles are also used for workflows, where roles can be assigned to workflow steps.

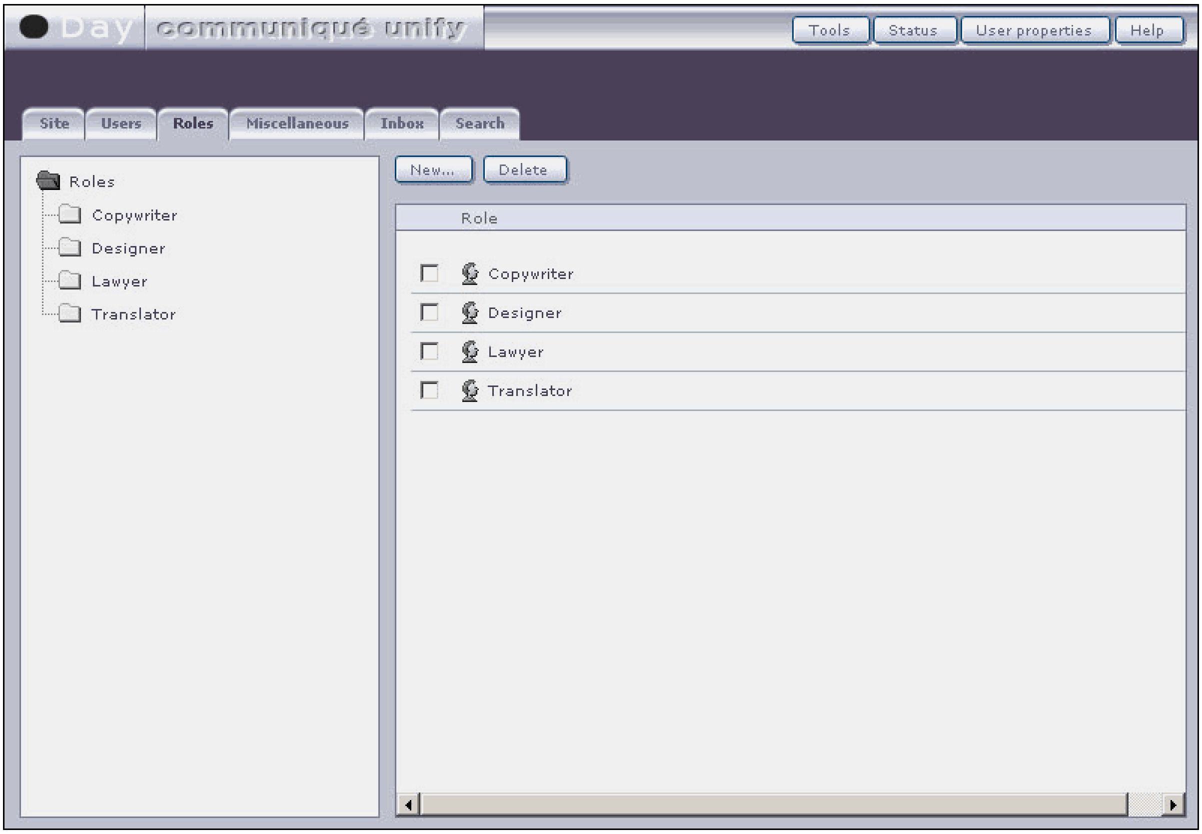
Roles are assigned in User Properties.

Roles Management

- Role Management GUI
- Adding a Role
- Editing Role Properties
- Deleting a Role

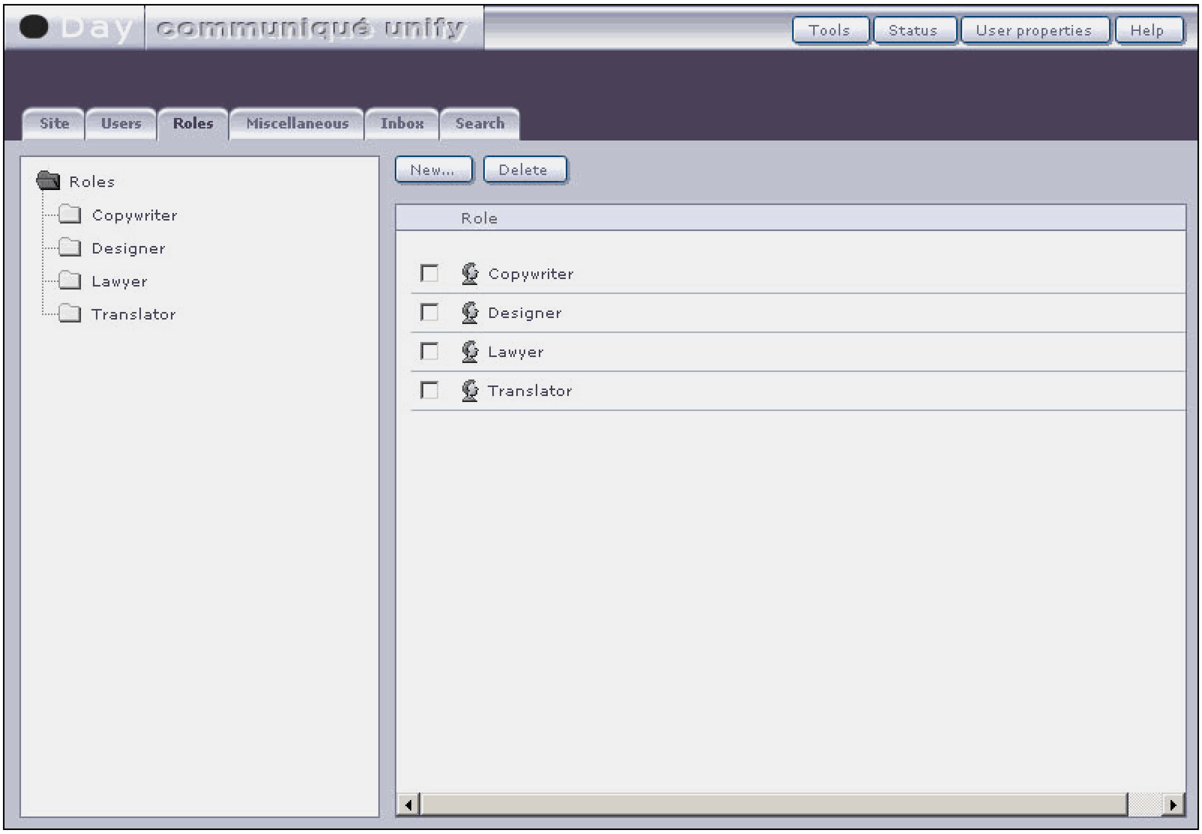
1.6.1. Role Management GUI

Roles are managed on the **roles** tab of the CMS console:



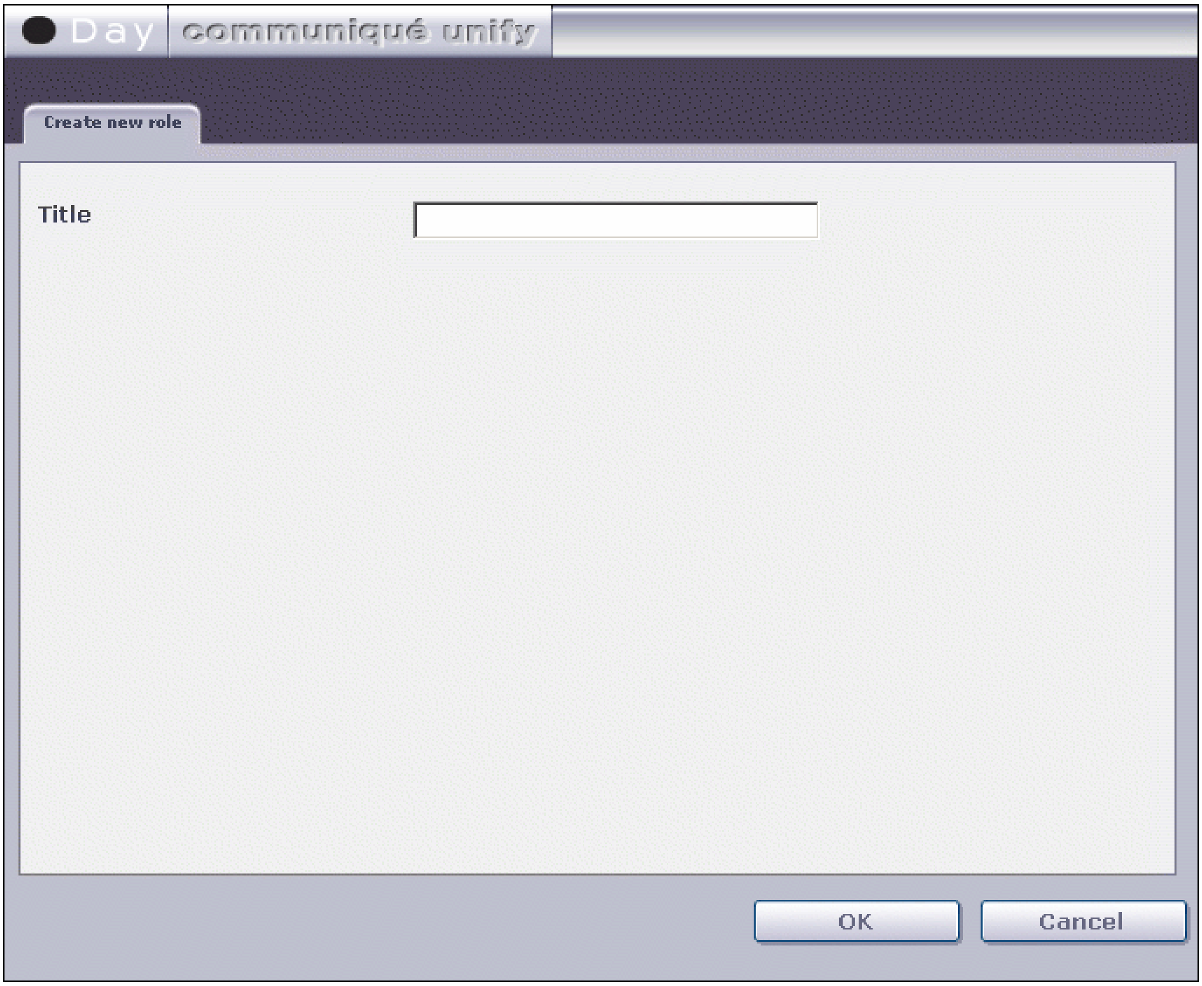
GUI Element	Description
Roles Tree	You can add roles as children of other roles for organizational purposes. Properties from one role are not inherited to its children.
Roles Listing	The roles listing provide a list of the **children roles** at the selected level of the roles tree.
Roles Actions	New : Create a new role. Delete : Deletes the selected role(s).

1.6.2. Adding a Role



To create a new role, first select the branch where the role should be inserted. This is done by selecting the new roles' **parent** in the **role tree**, so that the new roles' **siblings** are shown in the listing.

Then click the **`New#`** button. The CMS will display the **`Create Role`** dialog:

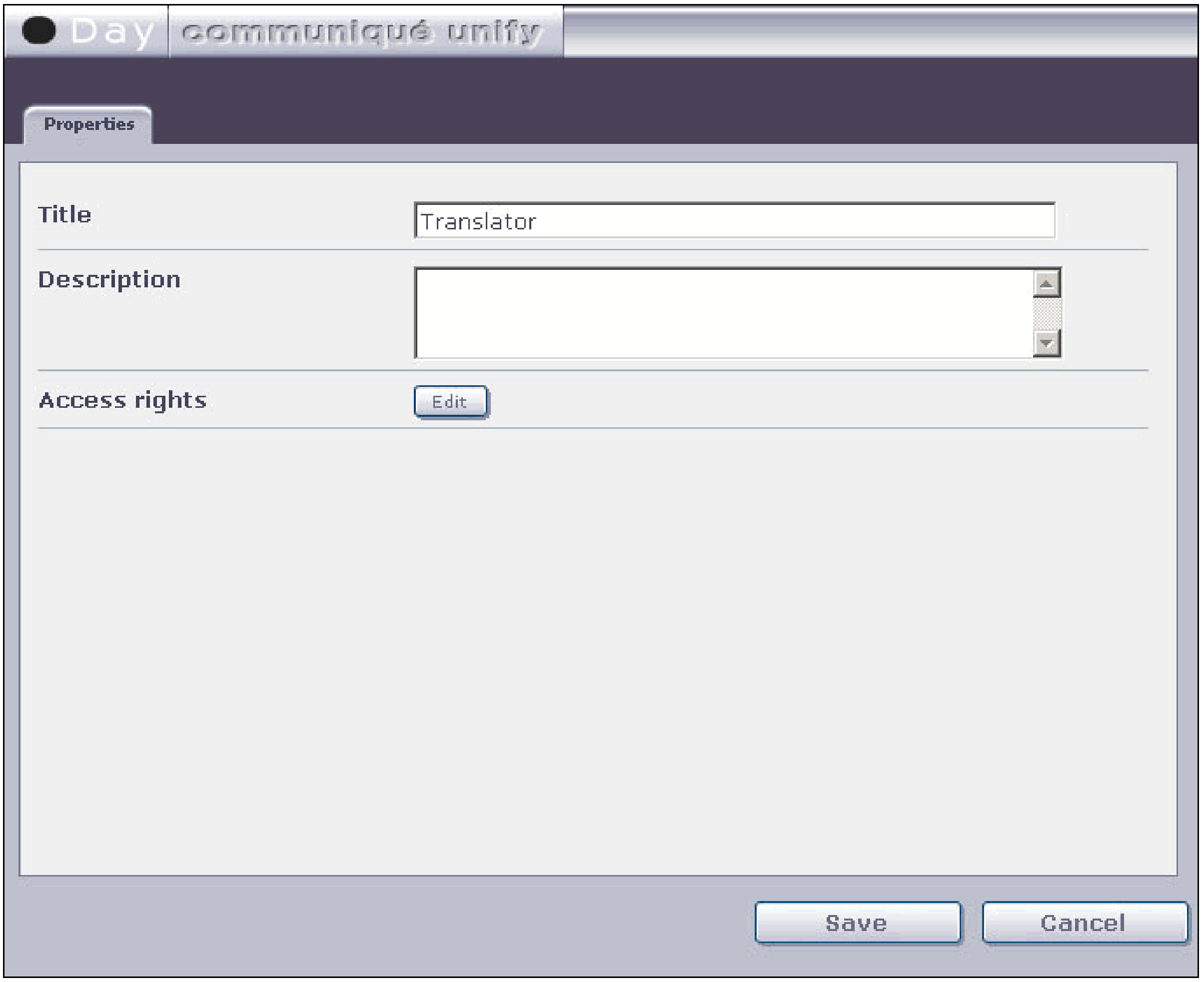


GUI Element	Description
Title	The name of the new role.
OK	Creates the new role and closes the dialog.
Cancel	Aborts the creation process and closes the dialog.

1.6.3. Editing Role Properties

To edit the properties of a role you must click on its icon in the roles listing to open the **Role Properties** dialog.

Properties Tab

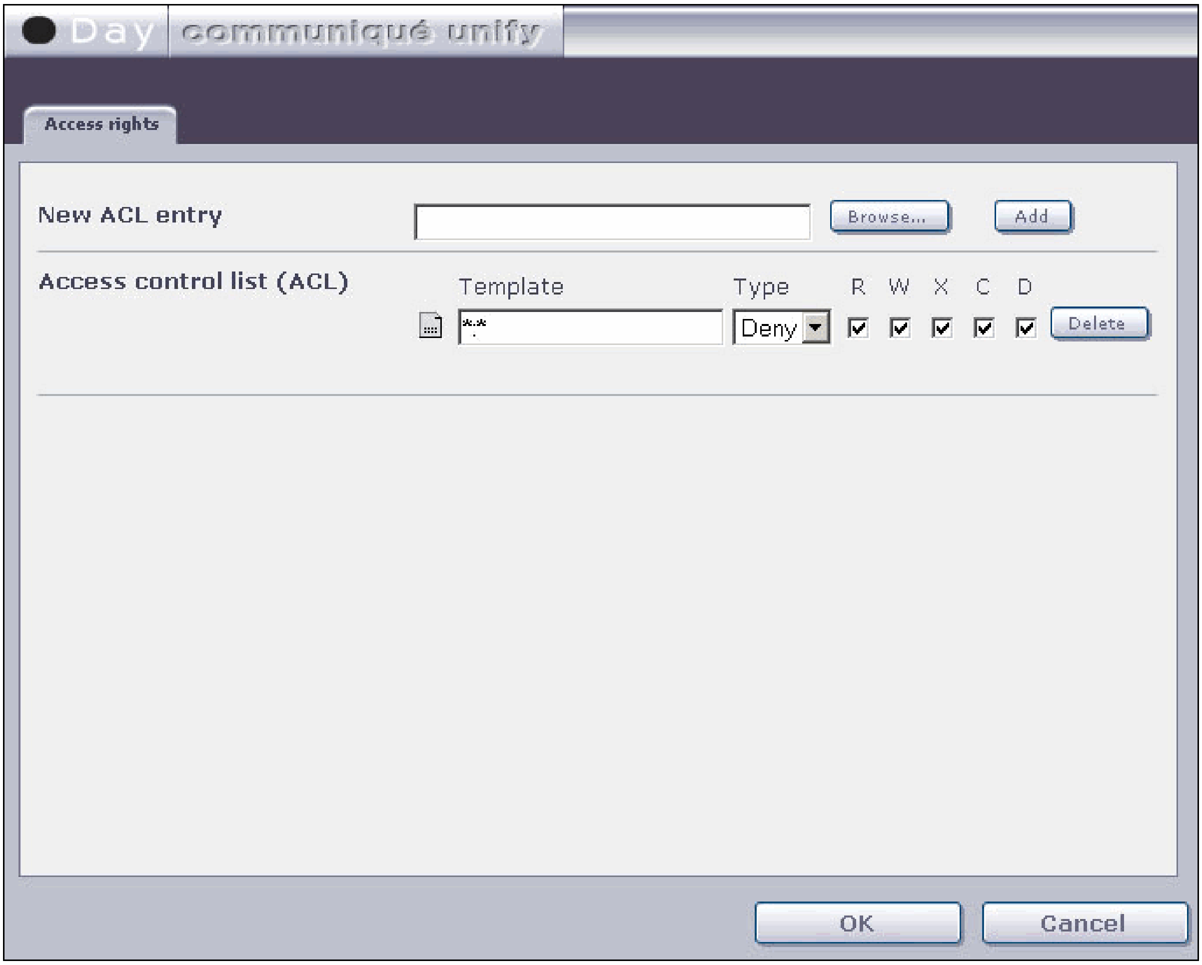


GUI Element	Description
Title	Title of the role to edit.
Description	A short description of the role.
Access rights	To define access rights you have to press the `edit` button.

Access Rights

Page content access rights are defined in the form of an **Access Control List** (ACL).

The ACL defines a number of **allow** and **deny** entries that are compared sequentially against the **content element** entry being accessed by this role and in the end the resulting right the role has on the content element is known.



GUI Element	Description
New ACL Entry	A content element in the ACL is defined using the following notation: **<TemplateName>:<atomName>.<atomName>...** The wildcard symbol * can be used at the end of the template name and at the end of the content element name to match content elements. For example :

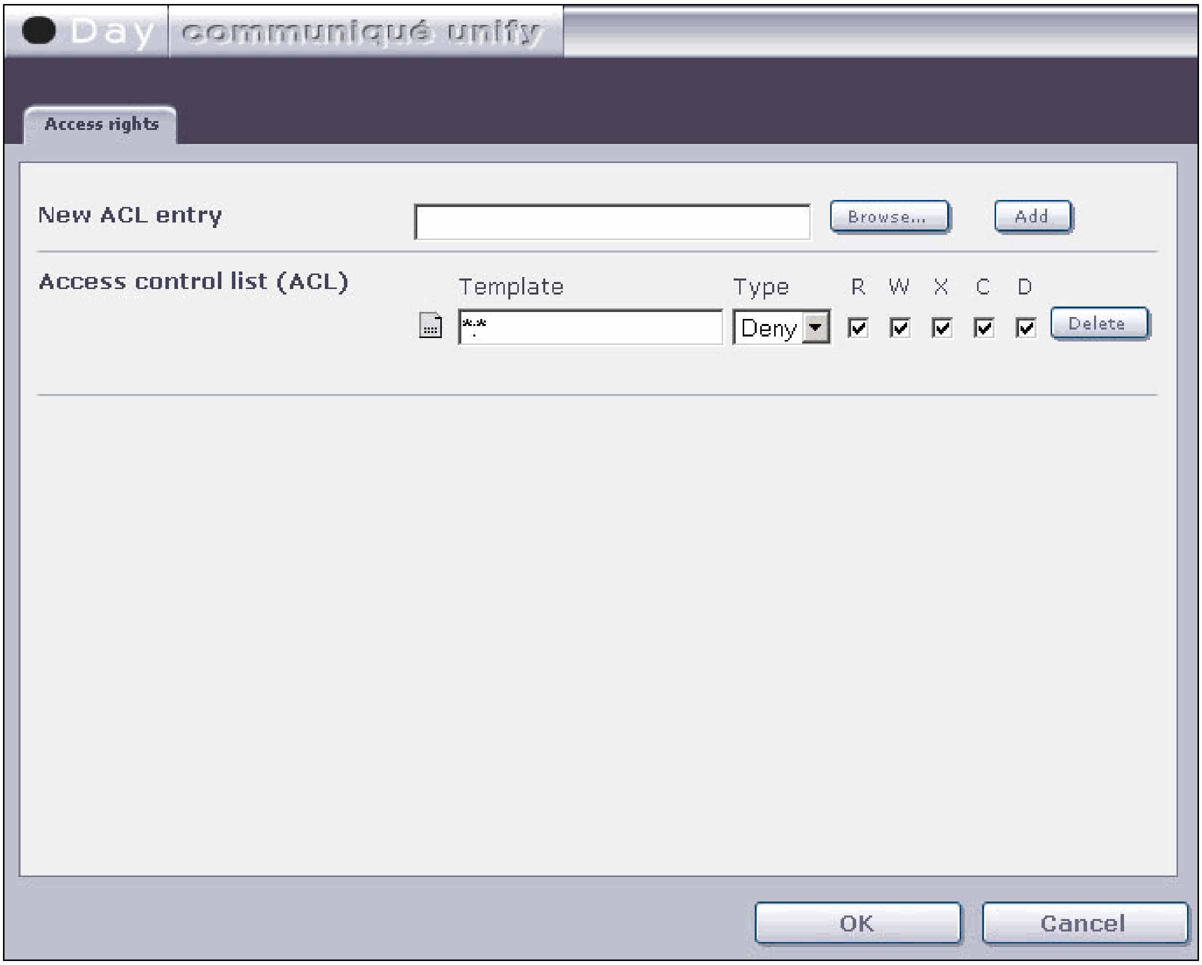
	`product_*:footnote*` This would select all content elements with a name starting with `footnote` that are defined in page created with a template where the name starts with `product_`.
Browse	Opens a **content element browser** . The browser shows a tree where the top level nodes are all templates and the children nodes are all available content elements in the template.
Add	Adds the new ACL entry to the access control list.
Access Control List	For each content element reference you can either allow or deny the following rights : - **R**: Referenced content element is visible (implementation is template specific). - **W**: Editing content elements of described type. - **X**: Not used. - **C**: Creating content elements of the described type. - **D**: Deleting content elements of the described type. Either set **Type** to **allow** or **deny** to give or take the above rights.
Delete	Deletes the Entry from the access control list.

Since the order in the ACL is important you can change the order of the entries by simply clicking and holding the document icon on the left side of your entry and to drag it to the position indicated by the bold line.

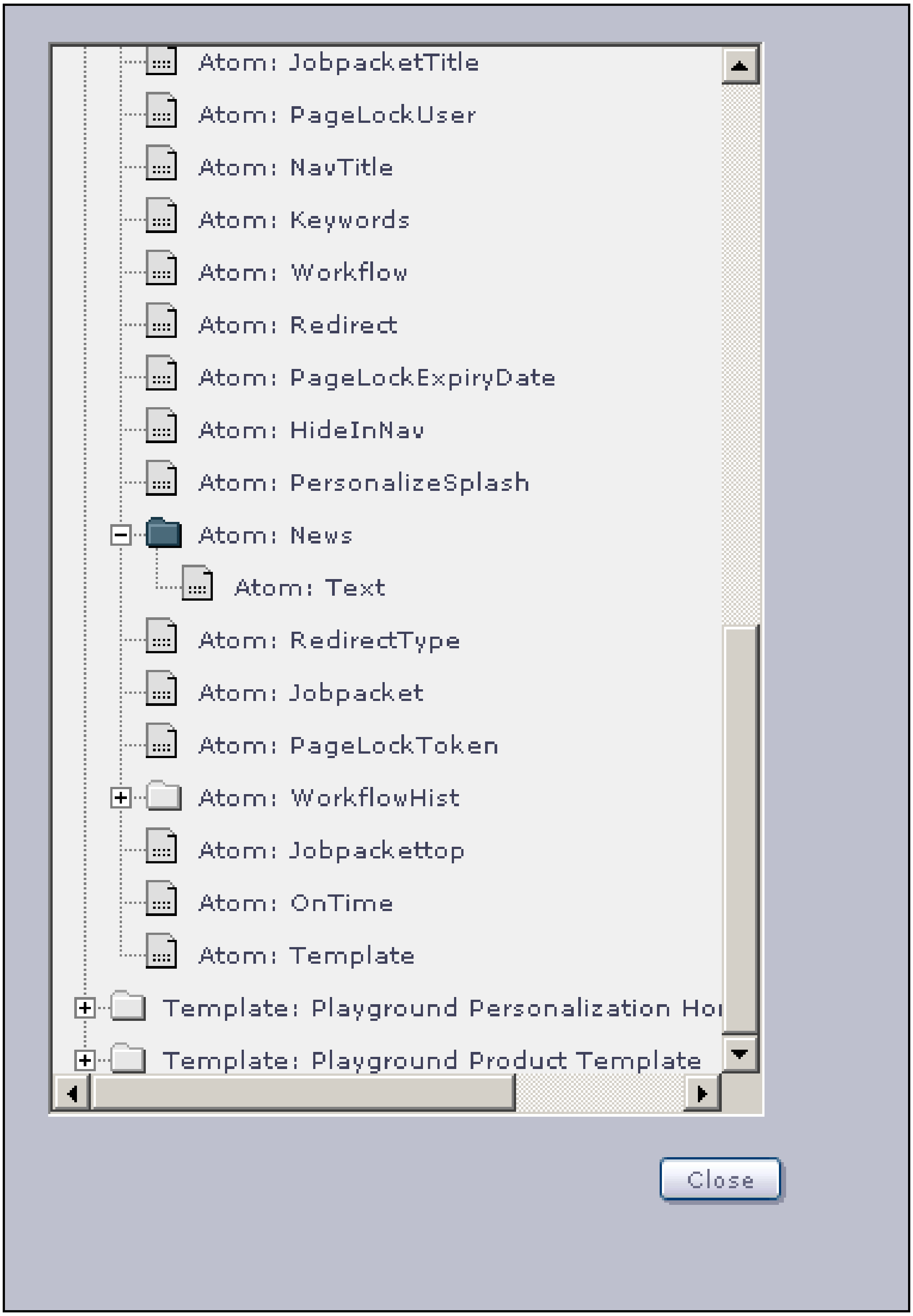
To get a better understanding let's look at an example using the Communiqué example project. We want to add a role for the news editor, so he can edit the news paragraph on the home page:

Create a new Role, name it e.g. **`News Editor`**, save it and click on its icon in the roles listing to edit his access rights.

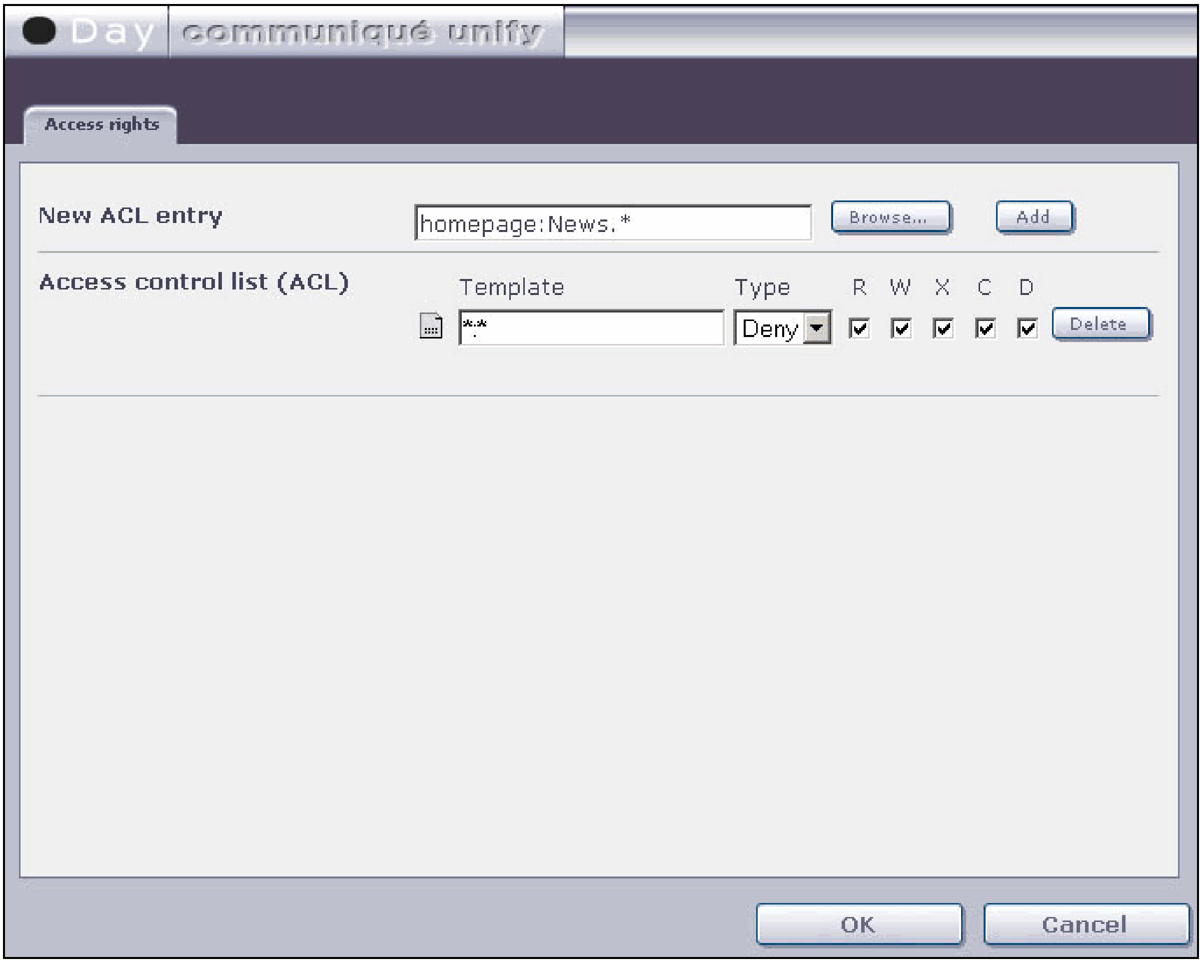
First all rights to all content elements in all templates is denied as a precaution. So type **`*:*`** in the **`New ACL Entry`** field and add it by clicking the **Add** button:



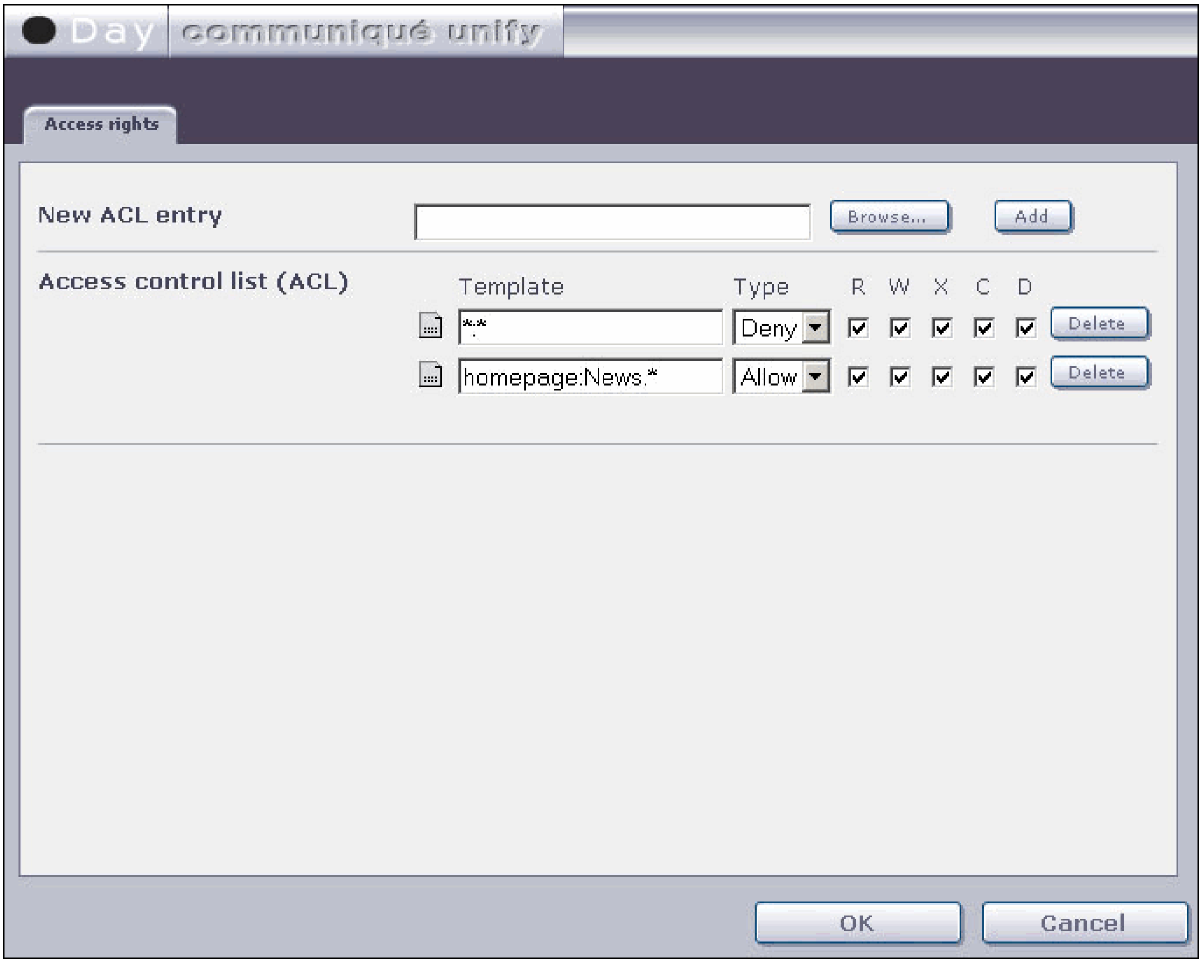
Next we give the role the right to edit all content elements belonging to the **News** paragraph. Click on the **Browse** button, go to the home page template and select the News content element:



Click on **`Close`** and the selected content element is added in the add new ACL Entry field:



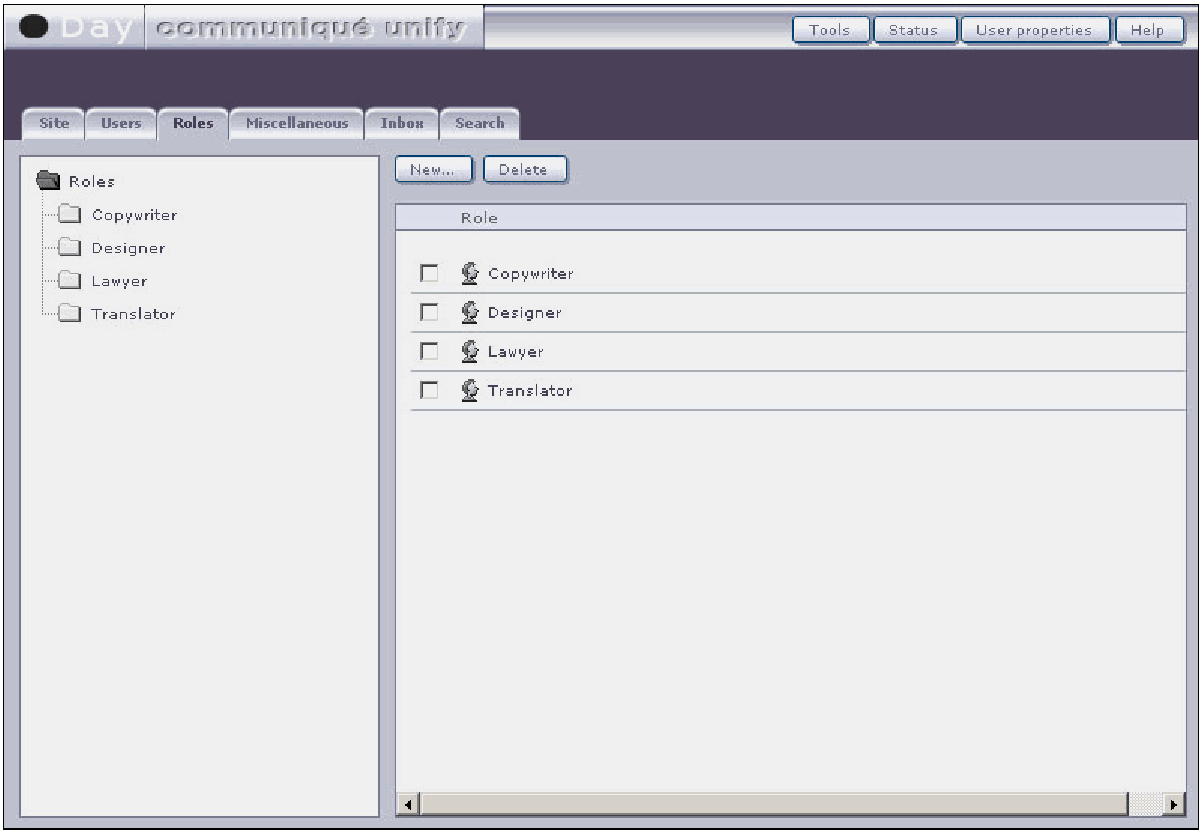
The wildcard symbol * is automatically added to include all sub elements. Click on the **Add** button to add the new ACL Entry to the access control list:



The role defined in this example can now be assigned to a user in his access control list. Then every time a user accesses a page created with a homepage template in the role of a news editor he will only be able to edit the `News` paragraph.

The rest will appear as read only, meaning that he can't make any changes to the other content elements even though the edit elements are visible.

1.6.4. Deleting a Role



To delete a role, first select the role(s) in the roles listing by clicking on the checkbox to the left of the roles entry, and then click the **`Delete`** button.

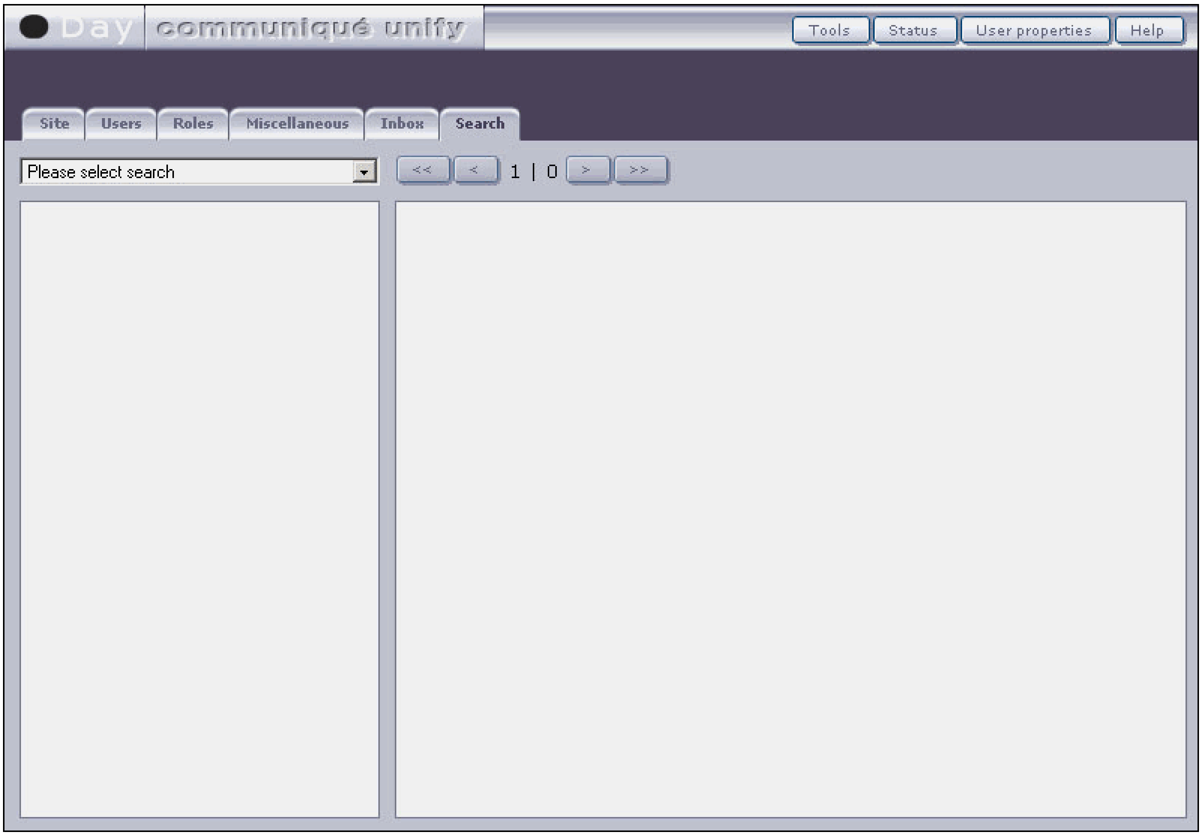
A message box will be displayed to confirm the choice. Clicking **`OK`** deletes the roles(s); clicking **`Cancel`** will abort the operation.

All users that had this role assigned lose the assignment.

1.7. CMS Search

This powerful search utility lets a user search for pages in different categories such as page permissions, replication actions, on/off times etc. There is also a global **search and replace** over all pages.

The search utility is located in the **search tab** of the CMS console:



CMS Search

- CMS Search GUI
- Content Management Audit Log Search
- Content Search
- Pages with On/Off Times
- Page Permission Search
- Search and Replace

1.7.1. CMS Search GUI

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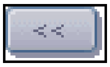
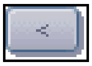
GUI Element	Description
Search Category	To start the search, first select the **search category** from the drop down list. **Not all of the search categories are available by default**. Certain categories must be explicitly allowed to a user by editing the user's properties. The **Superuser** user is the only user who has all search categories available by default.
Search Input Fields	After the selection of the search category the left frame of the search page then shows the available **search input fields** for the selected category.
Search Results	The right frame will show the **search results**.
Search Results Navigation	Control Elements to navigate through the search results. See next.

A search result page shows a maximum of 25 search results. All search categories offer the same search result navigation at the top of the search results frame:

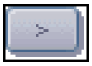


Jump to the **first** page of the search results.

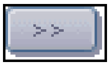


Show the **previous** search result page.

The first number denotes the **current** search result page number; the second denotes the number of **total** search result pages.



Show the **next** page of the search results.

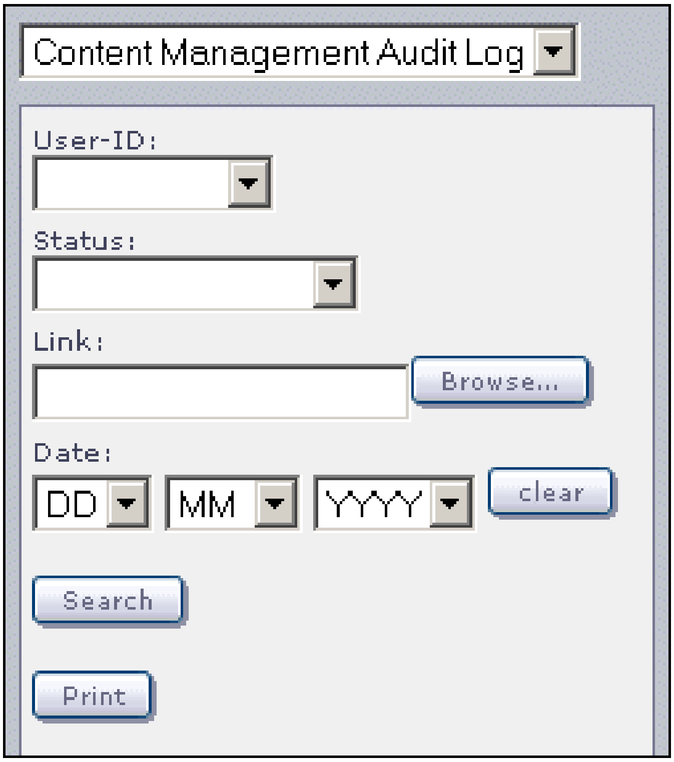


Jump to the **last** page of the search results.

1.7.2. Content Management Audit Log Search

The **content management audit log** search category allows a user to search for **content management actions** such as page activations, page deletions, etc.

The search can be restricted by the following: **user**, **status**, **directory**, and **date**.

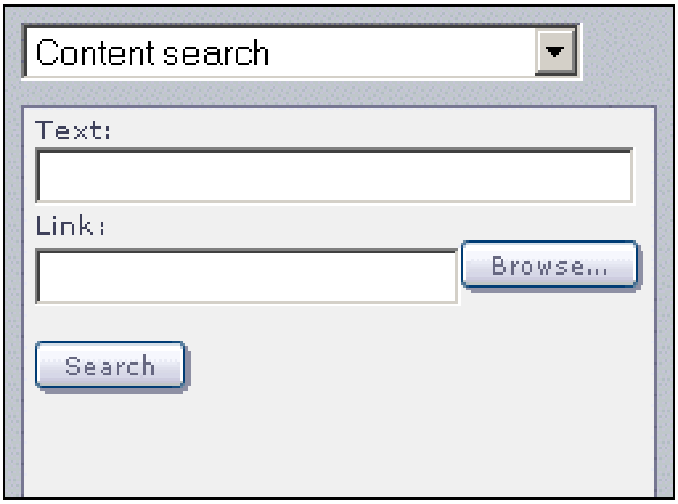


Input Field	Mandatory	Description
User-ID	No	Search for content management actions performed by the **selected user**.
Status	No	Search for one of the following **content management actions**: **`CreatePage`**: New content page created. **`ModifiedPage`**: Modified the content of a page. **`DeletePage`**: Deleted a page. **`OrderPage`**: Changed the order of a page. **`RestorePage`**: Restored an older version of a page.

		`ActivatePag`e: Activated a page. **`DeactivatePage`**: Deactivated a page.
Link	No	Search only the **selected page**. Click the **`Browse...`** button to select the sub tree root node from a site tree view. Use the wildcard symbol `*` at the end of the link to select a **sub tree**.
Date	No	The **date** when the content management action occurred. Click on **`clear`** to make the search date independent.

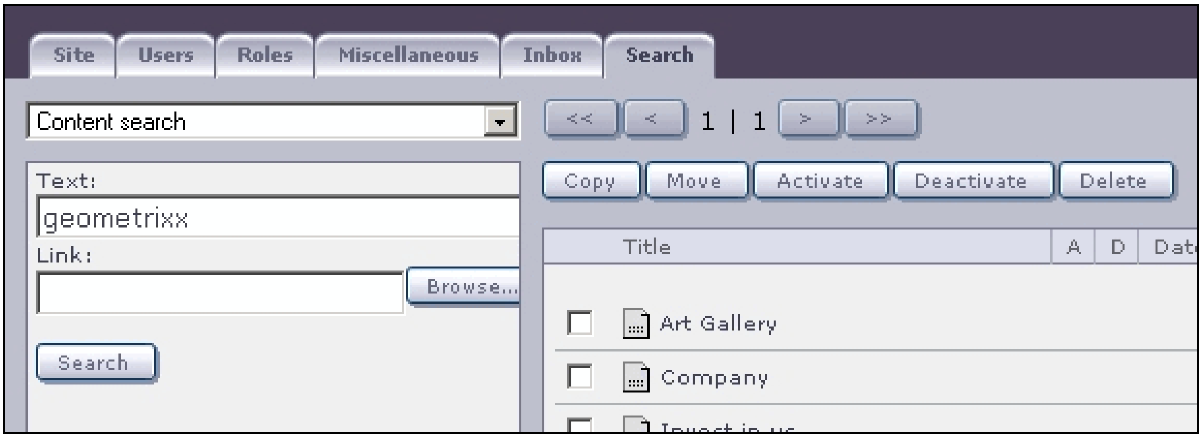
1.7.3. Content Search

The **Content Search** category allows a user to search for a string in the project content or a sub section of it.



Input Field	Mandatory	Description
Text	Yes	Enter the search query string. Use `*`, `""`, `+` and `-` to refine the search.
Link	No	The content tree branch to be searched. Use the **`Browse...`** button to select the sub tree root node from a site tree view.

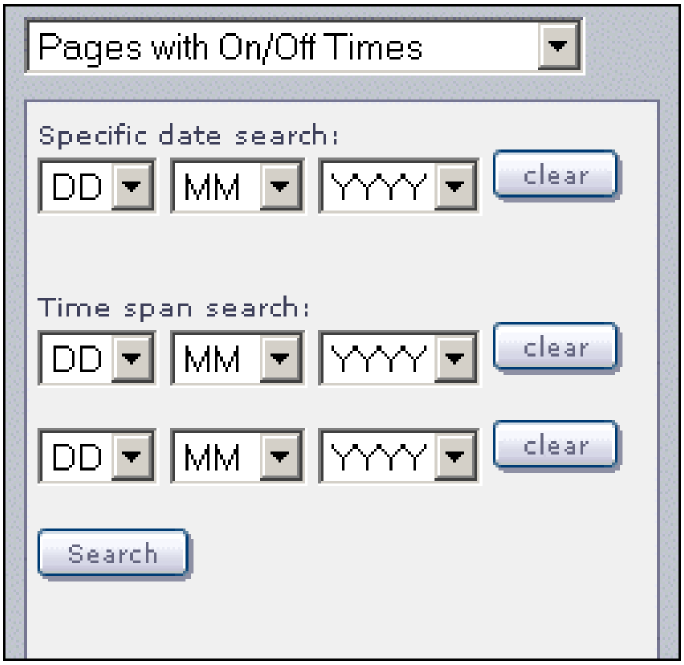
The search result frame shows the query results in the same form as the page listing pane in the site view. The same functions copy, move, activate, deactivate, and delete are available to the user.



1.7.4. Pages with On/Off Times

The **pages with on/off times** search category allows a user to search for **on/off events.** These events are defined in the Page Properties dialog by setting the **`On-Time`** and **`Off-Time`** values.

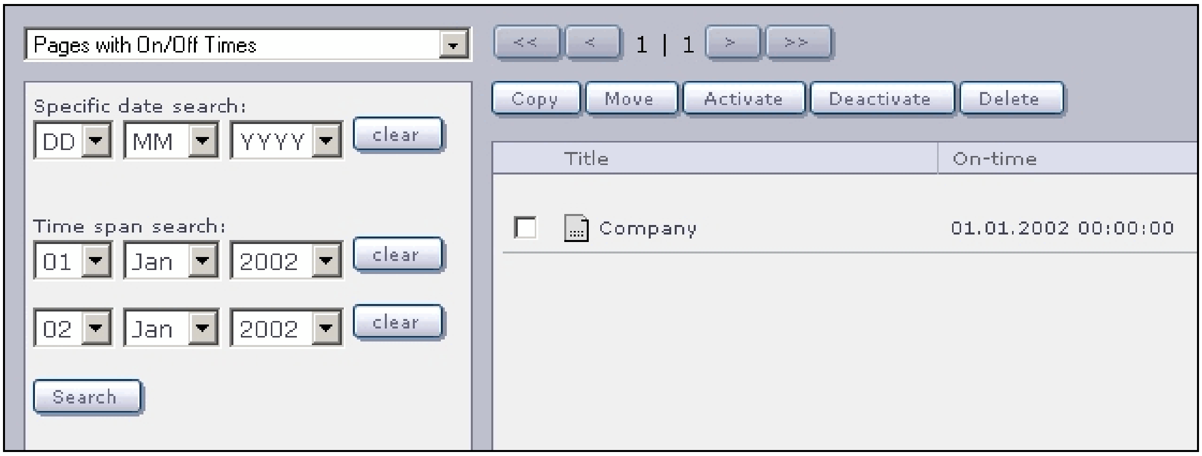
The search can be restricted to a specific **date** or **date span.**



Input Field	Mandatory	Description
Specific date search	No	Search for on/off events on a **specific date**.
Time span search	No	Search for on/off events in the **defined date span**. Both dates must be set or specific date search will executed instead.

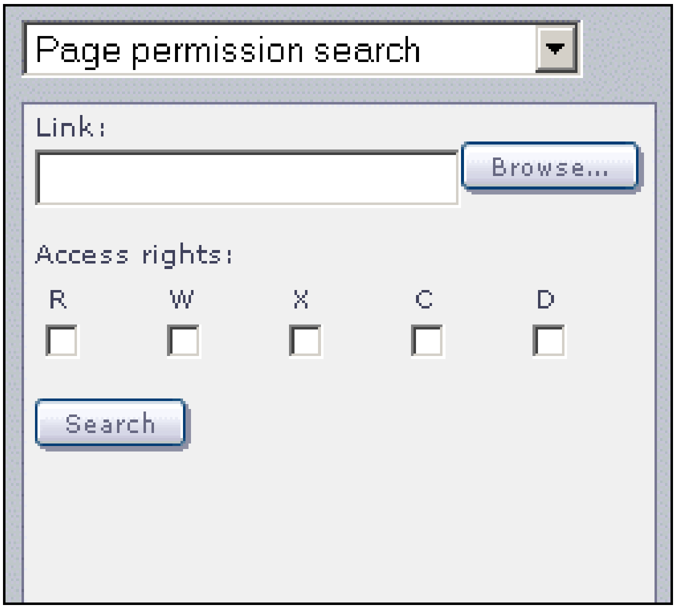
If both a specific date and a date span are defined the date span has priority.

The search result frame shows the query results in the same form as the page listing pane. The same functions copy, move, activate, deactivate, and delete are available to the user.


Pages with On/Off Times
Specific date search:
DD
MM
YYYY
clear
Time span search:
01
Jan
2002
clear
02
Jan
2002
clear
Search
<<
<
1 | 1
>
>>
Copy
Move
Activate
Deactivate
Delete
Title
On-time
Company
01.01.2002 00:00:00

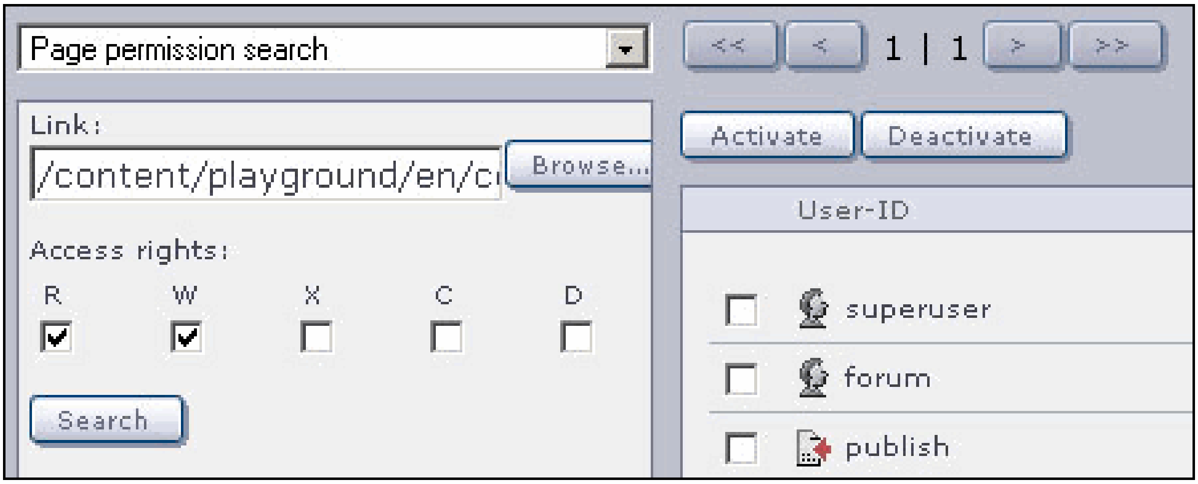
1.7.5. Page Permission Search

The **page permission search** category allows a user to search for other users that have a defined set of rights for a page.



Input Field	Mandatory	Description
Link	Yes	Search users with access rights to the selected page. Click the **`Browse...`** button to select the sub tree root node from a site tree view. Use the wildcard symbol `*` at the end of the link to select a sub tree. Leave blank to search for users with access rights to all pages.
Access Rights	Yes	The page access rights a user must have for the defined page(s): **`R`**: user has read rights. **`W`**: user has write rights. **`X`**: user has activation/deactivation rights. **`C`**: user is allowed to created sub pages. **`D`**: user is allowed to delete sub pages.

The search result frame shows the query results in the same form as the page listing pane. The same functions activate and deactivate are available to the user.

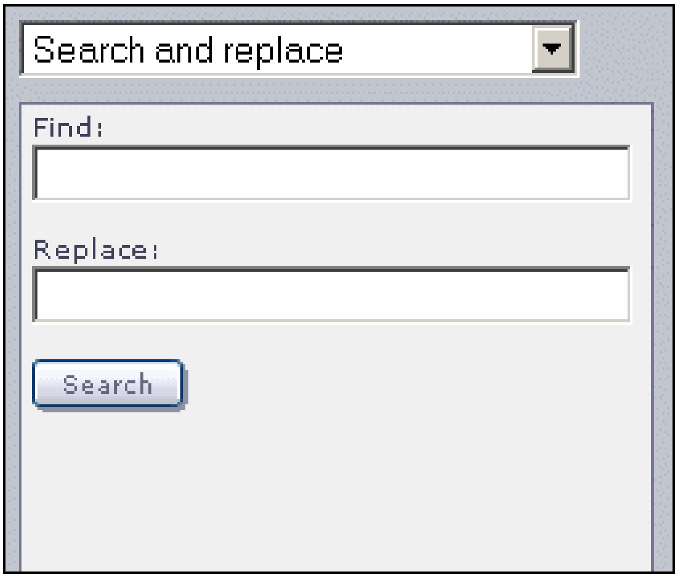


1.7.6. Search and Replace

The **search and replace** category provides a powerful search and replace function.

Use the replacement function with care. This process cannot be undone.

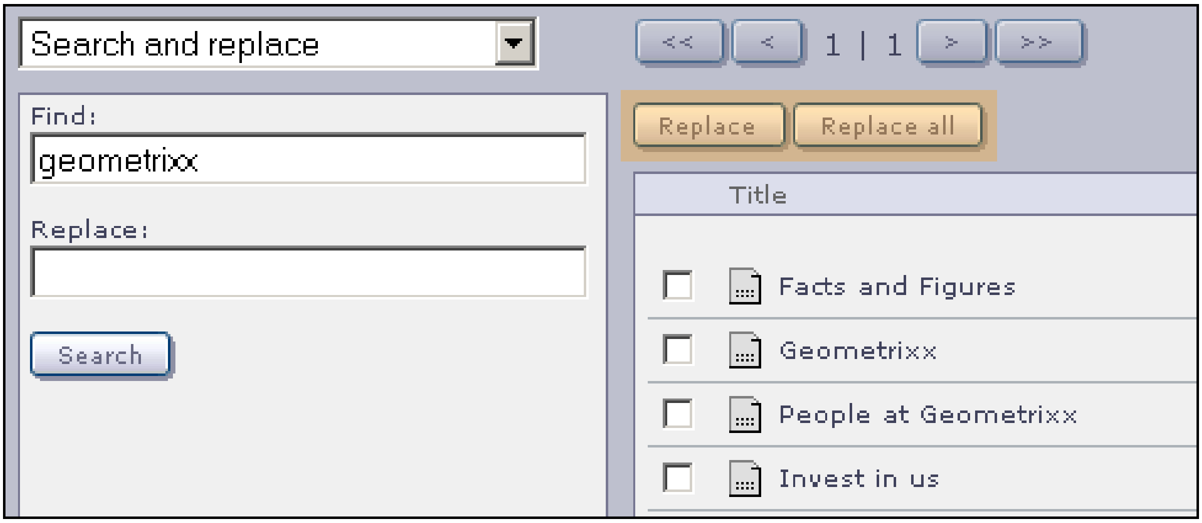
First you define your **search query** and search for matching pages, afterwards you define the **replace string** and **select the page(s)** in which you want the replacement to occur:



Input Field	Mandatory	Description
Find	Yes	The **search query**. You can use *, "", + and - to refine your search.
Replace	No	The **replacement string**.
Search		Starts the search and lists all found pages in the right search result frame. No replacement happens even if you defined already the replacement string.

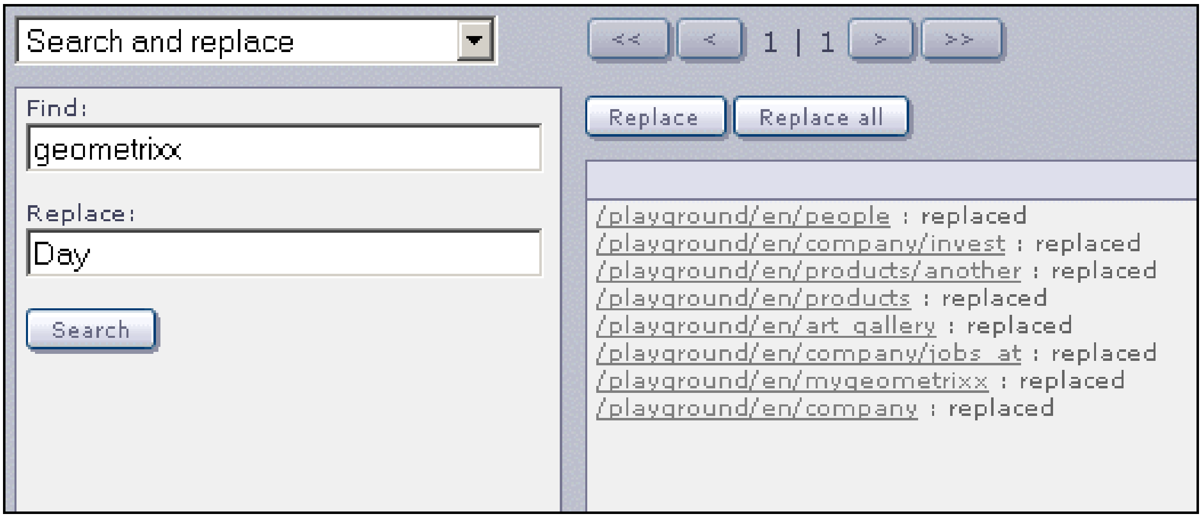
The search result frame shows the found pages.

After adding the replacement string you can use one of the following two buttons:



Function	Description
Replace	Replaces the search string with the replacement string in **all selected pages of the search result page**.
Replace All	Replaces the search string with the replacement string in **all pages of the search result set**.

During replacement the search result frame will list links to all pages where the replacement process has completed:



The search function is **case-insensitive** but the replacement procedure is **case-sensitive**. Therefore, to ensure that different versions of the same word get replaced, the search query string

should always contain all possible versions.

Searching for:

```
geometrixx
```

or

```
Geometrixx
```

will give the same search result set, but only the occurrences written with the same case will be replaced.

Searching for:

```
geometrixx Geometrixx
```

will again give you the same result set, but this time both case versions will be replaced.

In addition, to avoid corruption of content on the website the replacement occurs only on whole words (no substring replacement).

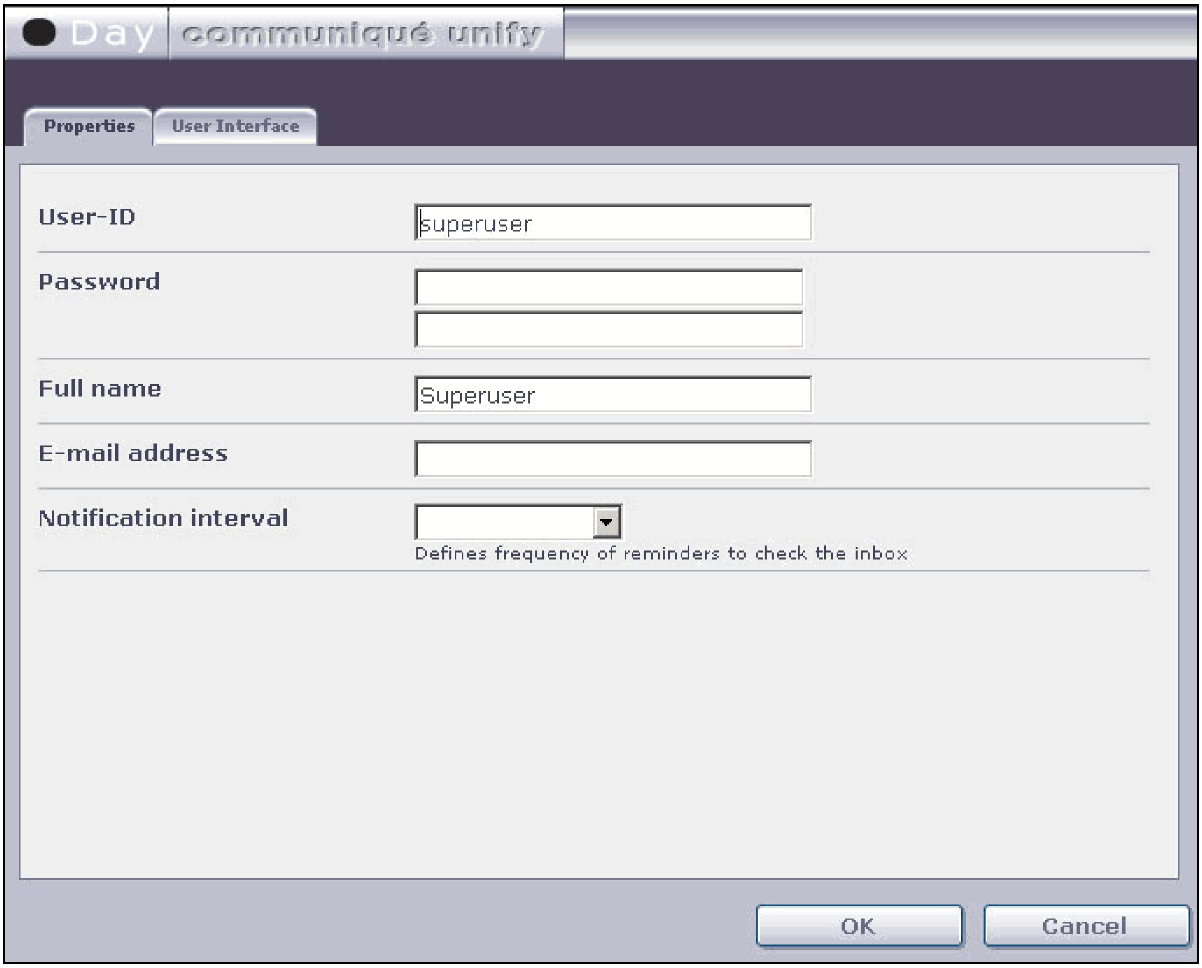
1.8. Communiqué Unify Engine Status Dialog

The status dialog gives an overview of some actual settings in the system. The information shown in this dialog are usually only of interest for web developers during development on of a project and are usually not visible to normal CMS users.

1.9. User Properties Dialog

By clicking on the **user properties** button in the top left of the CMS GUI, the user can edit his own user properties. The dialog has two tabs `Properties` and `user Interface`.

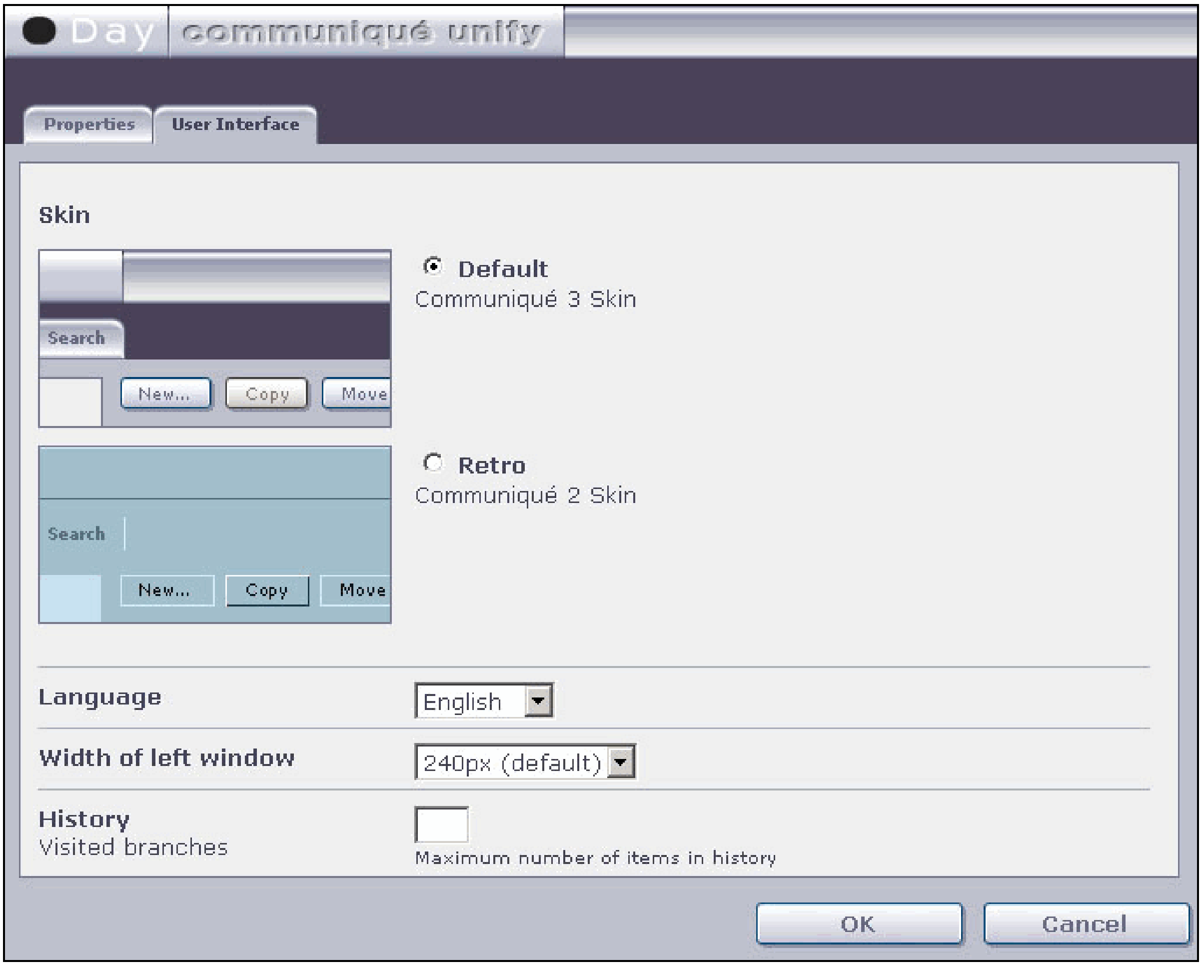
Properties



GUI Element	Description
User-ID	The users name.
Password	Password of the user. Note that the password is displayed as a series of asterisks for security. The password must be entered twice in order to verify that it is correct.
Full Name	Full name of the user.

E-mail address	The e-mail address of the user.
Notification interval	Frequency of mail reminders to be sent the user to check the workflow inbox for changes.

User Interface



GUI Element	Description
Skin	Choose a skin from the options provided: - Default - Retro
Language	Language the user wants to have in the CMS. Currently the following languages are available :

	- Deutsch (German) - English - Español (Spanish) - Français (French)
Width of left window	The width of the navigation pane in the site and user view.